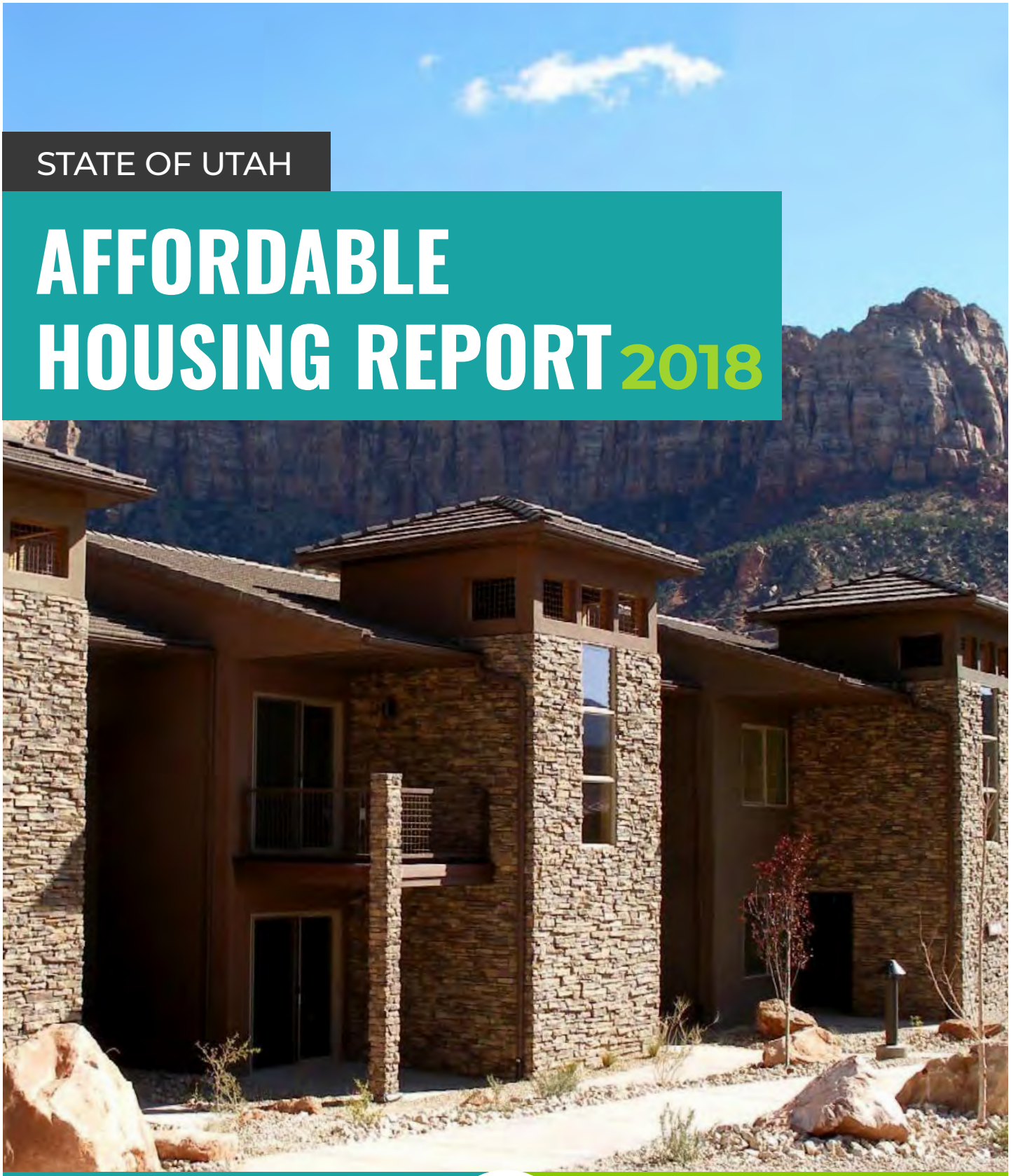
STATE OF UTAH

AFFORDABLE HOUSING REPORT 2018



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HOUSING & COMMUNITY DEVELOPMENT

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FOREWARD

Utah's recovery from the 2008 recession over the past decade has proven that our great state is undoubtedly a leader in many of the areas that we value most. Housing affordability plays a pivotal role in the overall quality of life in each of our communities by contributing to the social, economic and environmental well-being of our citizens.

Improving the availability of reasonably priced housing and fostering inclusive communities must become a top priority of Utah's communities. Attaining decent, affordable housing is vital to building a conducive environment for a stable, nurturing and advantageous home. Affordable housing development and preservation enables families earning a modest income to fully participate in, and benefit from, all aspects of neighborhood and community life.

At the heart of achieving self-reliance are the opportunities to provide for the needs of one's own family, and the quality of those opportunities. Not surprisingly, job opportunities and affordable housing are related. Housing costs directly impact the wages at which employees are willing to work, which ultimately determines how many good-paying jobs businesses can afford to create in our communities. As a state, we are better positioned to attract and retain successful businesses when members of our labor force can afford to live near to their places of work.

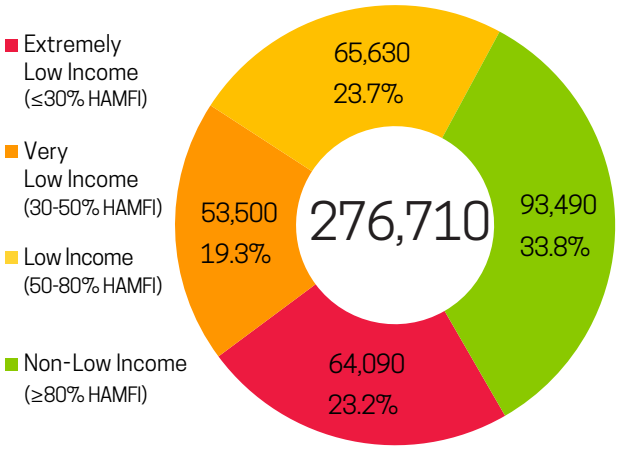
The State of Utah supports evidence-based policies and practices that further fair and affordable housing in our communities. Research has consistently shown that decent affordable housing serves a vital stabilizing function for families with modest incomes. It has also shown that decent affordable housing improves the overall health, safety and welfare of our communities while reducing crime and poverty. Low-income households are more self-sufficient, and less dependent upon public assistance when they can afford decent housing.

The availability of affordable housing doesn't just affect the poorest among us, it affects everyone that calls Utah home. Working together, we have, we are, and we will continue to create innovative strategies that will allow Utahns to thrive.

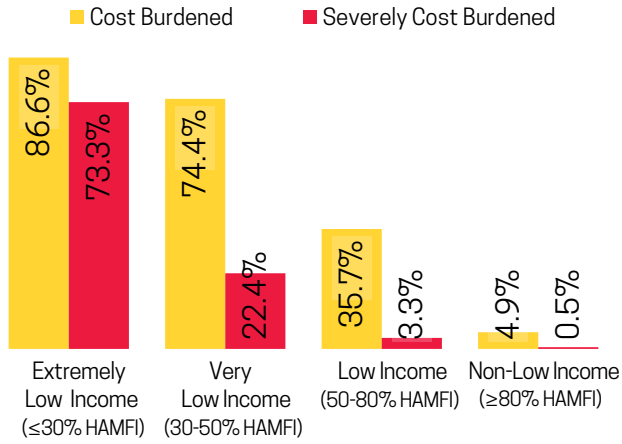
Jonathan Hardy, Director
Housing and Community Development Division
Utah Department of Workforce Service

STATE OF UTAH AFFORDABLE HOUSING GAP ANALYSIS

State of Utah's Renter Households by Income Level



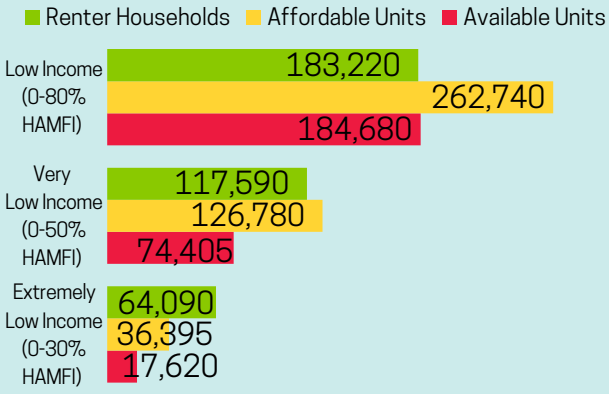
State of Utah's Proportion of Cost Burdened Renter Households



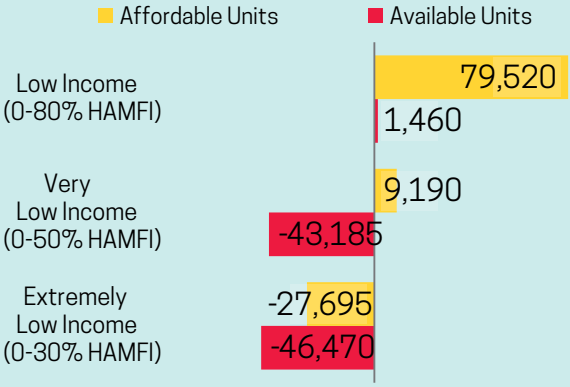
Comparison of State of Utah and United States's Affordable & Available Rental Housing Units per 100 Renter Households

GAP HAMFI LEVEL	Affordable Units		Available Units	
	State of Utah	United States	State of Utah	United States
Low Income (0-80% HAMFI)	143.4	131.1	100.8	94.7
Very Low Income (0-50% HAMFI)	107.8	88.2	63.3	57.0
Extremely Low Income (0-30% HAMFI)	56.8	54.0	27.5	29.7

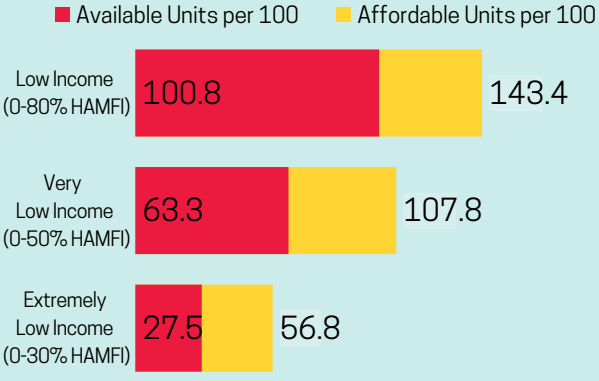
State of Utah's Affordable & Available Rental Housing Gap



State of Utah's Affordable & Available Rental Housing Deficit



State of Utah's Rate of Affordable & Available Rental Units per 100 Renter Households



Source: U.S. Dept. of Housing & Urban Development. (2018). Comprehensive Housing Affordability Strategy, 2011-2015 [Data]. Available at: https://www.huduser.gov/portal/datasets/cp.html

1. EXECUTIVE SUMMARY

By many objective metrics Utah is thriving. However, that does not mean that every household in Utah is prospering. Rising housing costs and real income stagnation are increasingly threatening the ability of families with modest incomes to make ends meet. The State of Utah has done much to address the availability of affordable housing in the two years since Lt. Governor Spencer Cox convened a special affordable housing task force. Public-private partnerships are increasing. The State's housing programs are running more efficiently and more strategically than ever. Local governments are working even closer with state agencies to solve this critical issue. Nonetheless, significant population growth from natural increase and economic development continue to drive Utah's demand for housing. Production factors such as the high value of land, higher material costs, and a shortage of construction labor significantly contribute to delays in developing an adequate supply of affordable housing. Unless Utah invests in a more pre-emptive approach to housing policy and plans more effectively for its future housing needs, its housing shortage will only increase, and the gap in housing affordability will continue to widen.

Under the direction of the Utah Commission on Housing Affordability,[1,2] staff of the Housing and Community Development Division of the Utah Department of Workforce Services undertook the task of preparing the 2018 State of Utah Affordable Housing Assessment. Two sections of the report provide an overview of the State's supply and demand for housing. The following section then examines the affordability of housing for segments of the State's population. The primary assessment component of the report continues monitoring Utah's gap in affordable housing for households with modest incomes. Specifically, it considers the availability of affordable rental units for three categories of renter households whose income are below the median income.

BACKGROUND OF THE AFFORDABLE HOUSING PROBLEM IN UTAH

At its most fundamental level, housing is simply *protection from the elements.* Although the amount of shelter one can afford to consume may vary from one household to the next, everyone has a basic physiologic need for adequate shelter. Nonetheless, finding affordable housing in a suitable environment fulfills much more than a basic need for Utah's families. Neighborhood choice affects many elements of family life. It affects one's quality of life, employment opportunities, and access to transportation, quality education and even health.

The demand from new households is growing by 10,997 per year, on average. The good news is that the state's total supply of housing is increasing by 13,430 per year on average. Unfortunately, renter households are growing at a faster pace than owner households, and there are not enough rental units being produced to meet the need. Although Utah has managed to maintain an overall 10.1 percent vacancy rate between 2009 and 2016, the scant supply of vacant housing units is rapidly dwindling and much of that limited supply is either unavailable or not where it is needed most. The availability of affordable rental housing for households with incomes below 50 percent of the State's median family income continues to be one of Utah's most pressing issues. Unsurprisingly, the severity of housing insecurity increases as income decreases, especially for those households with incomes below 30 percent of the median family income. Utah's housing trends indicate that housing insecurity is becoming a tangible problem for many households beyond just those with a modest income.

THE DEMAND FOR HOUSING IN UTAH

Utah's housing demand is attributable primarily to demographic and economic trends. Between 2009 and 2016, the State's population has grown by 296,611 people, or 86,804 households according to U.S. Census Bureau estimates. That is to say that the state's population has been growing at an average rate of 45,031 people, or 10,997 new households, per year. The majority of Utah's population growth has come from natural increase rather than net migration. Through natural growth, Utah's population grew, on average, by 42,653 people each year between 2010 and 2016.

Another factor driving Utah's demand for housing has been its resilience to market instability due to its diverse economy. Economic growth and development have increased employment by an estimated 250,154 jobs and the State's unemployment numbers have declined from 99,844 in 2009 to 50,902 in 2016 according to estimates from the U.S. Bureau of Labor Statistics. It is assumed that word of these opportunities has spurred economic migration, which occurs when workers and their households move from a region with fewer economic opportunities to a region with more opportunities. While it is difficult to distinguish each household's reason for migrating to and from Utah using available data from the U.S. Census Bureau, we know that Utah's population has been growing, on average, by 7,395 people per year from net migrations. However, that rate has been declining in recent years, presumably due to economic improvements around the country.

UTAH'S SUPPLY OF HOUSING

Despite significant population growth in the State's metropolitan regions, construction firms built fewer homes per capita in the years following the 2007 recession than before. Quarterly employment surveys from the U.S. Bureau of Labor Statistics indicate that many small- to medium-sized housing developers and residential construction firms laid off their workers and closed their doors for good. In fact, employment in residential construction has yet to reach its pre-recession levels. Slight improvements observed since 2011 offer hope, but a failure to sustain the more promising trends observed between 2013 and 2016 is a sobering reminder of the precariousness of Utah's housing markets. To complicate matters further, the other classic factors of production increasingly constrain the development of new homes in regions with the greatest needs. The cost of land within the state's metro areas continues to climb, and the cost of building materials is escalating.

And finally, capital financing costs are on the rise again due to higher interest rates. These issues contribute to construction lag, which is the time it takes developers to plan, finance and construct housing units.

Utah has a housing 'fit' problem as well as an affordability problem. In 2016, Utah had a total of 918,367 occupied housing units ranging from single-family detached units to multi-family units to mobile homes, boats and RVs. 638,767 (69.6 percent) units were owner-occupied and 279,600 (30.4 percent) units were renter-occupied. 64.8 percent of all housing units in Utah were owner-occupied single-family units, while just 17.9 percent were renter-occupied multi-family units. This is a fit problem because the number of owner households grew at an overall average annual growth rate of just 0.92 percent per year while renter households grew at 2.69 percent per year between 2009 and 2016.

HOUSING AFFORDABILITY

A rapidly growing population and lagging housing production are the primary causes of housing shortage in many of Utah's regions. Rising housing costs and stagnating real wages are the primary causes of worsening housing affordability in Utah. From 2009 to 2016 real income only grew at 0.31 percent per year while rent crept upward at a rate of 1.03 percent per year in 2017 constant dollars. Housing affordability is simply the ratio of monthly housing costs to gross monthly income. Households that expend 30 percent or more of their income on housing costs are considered to be cost-burdened, while those that must spend 50 percent or more are severely cost-burdened. According to the U.S. Bureau of Labor Statistics' 2017 Consumer Expenditure Survey, the average renter household in the western U.S. spends 34.9 percent of their monthly income on gross rent and is considered to be cost-burdened. In Utah, the median gross rent is particularly concerning in Grand, Iron, Morgan, and Washington counties, where the median rent exceeds 30 percent of the county's median income.

Housing affordability is an especially notable concern among various segments of the state's population and workforce. A person with a disability would find it difficult to afford the median rent in 18 of Utah's counties. Utah's workforce in several industries struggle to pay the rent. These industries include accommodations and food services, retail trade, agriculture, educational services, and arts, entertainment and recreation.

For example, the typical food server would have to devote 50.8 percent of their monthly income to paying the median gross rent. In general, those without a post-secondary degree are significantly more likely to have difficulty paying the median rent in Utah.

MODERATE-INCOME HOUSING MISMATCH AND WORST-CASE HOUSING NEEDS

According to the Utah Code, "Moderate-income housing means housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80 percent of the median gross income for households of the same size in the county in which the city is located."[3] Comprehensive Housing Affordability Strategy (CHAS) data show that since 2009, the first dataset to cover the recessionary period, nearly two-thirds of renter households in Utah had incomes below 80 percent of area median income (AMI) and were thus categorized as low-income (LI), very low-income (VLI), or extremely low-income (ELI). Notably, nearly one-quarter of all renter households in Utah were ELI households.

There simply is not enough affordable rental housing available for moderate-income renters in Utah. According to the most recent Comprehensive Housing Affordability Strategy data from the U.S. Department of Housing and Urban Development, between 2011 and 2015 there were 271,581 renter households in Utah, which is an increase of 6,646 (2.5 percent) households over the previous year's estimate. 45.5 percent of all renters spent more than 30 percent of their gross income on rent each month, and 23.0 percent of all renters spent more than 50 percent of their income on rent. Of those households, 178,624 (65.8 percent) had an income of 80 percent or below the median income, which is an increase of 6,076 (2.5 percent) households over the previous year's estimate and comprised 91.4 percent of the growth in renter households. The segment of Utah's renter population that has been most adversely affected by rising housing costs were Extremely Low-Income (ELI) renters. 63,974 (23.6 percent) renter households had an income less than or equal to 30 percent of the median income, which is an increase of 2,631 (4.4 percent) over the previous year's estimate. 74.5 percent of ELI renters spent more than 50 percent of their monthly income on rent. Data also indicated that there is only 26.9 affordable housing units available per 100 ELI renter households. This has resulted in a shortage of 45,530 affordable housing units available for ELI households to rent. Linear projections suggest that this shortage may reach 58,619 units by 2020, if current conditions persist.

Utah's rental housing gap stems from an increasing mismatch between renter households and the housing units they could potentially afford. According to HUD's Worst Case Housing Needs reports and the National Low-income Housing Coalition, a housing unit is available, "if that unit is both affordable and vacant, or is currently occupied by a household at or below the defined income threshold." Data indicates that there were 183,220 moderate-income renter households earning less than $5,033 per month in Utah, and there were 262,740 affordable units with a gross rent less than $1,511 per month.

However, 78,060 of those units were occupied by a household earning more than $5,033 per month, and all of those households could afford to rent or purchase housing units that cost more than $1,511 per month. The mismatch problem is most evident for housing units that are affordable for ELI households because 18,775 (51.6 percent) units of the state's supply of housing units that cost less than $568 per month to rent are occupied by households earning more than $1,892 per month.

An affordable housing shortage occurs when there are more renters at a particular income threshold than there are affordable housing units. The availability gap is widened when households with higher incomes rent units that households with lower incomes could tentatively afford to rent. Based on HUD's data, there are 79,520 housing units affordable for moderate-income households in Utah, however, 78,060 of those units were occupied by a non-low-income household, which means that there is a slight surplus of 1,460 of affordable units still available for households earning close to $5,033 per month. However, those units are still unaffordable for very low-income households earning less than $3,150 per month and extremely low-income households earning less than $1,820 per month. In fact, Utah needs 43,185 more affordable and available units to house its population of renters with an income between 0 and 50 percent of Utah's median family income. Nonetheless, the majority of Utah's 46,470 housing unit shortage comes from extremely low-income households because there are only 17,620 affordable housing units available for 64,090 renter households who can only afford to pay $568 or less per month for rent.

Utah has the 10th worst rate of affordable and available rental housing units per 100 extremely low-income households in the United States.

CONCLUSION

Research from the National Association of Home Builders found that without adequate planning, "the population growth that accompanies economic development leads to increases in demand for housing that outstrips the ability of the market to respond, given the current land use system. Rises in the price of housing quickly exceed wage growth." [4] Given Utah's economic priorities over the preceding decade and its more recent decline in housing affordability, this assessment is particularly relevant now. The number of moderate-income renters seeking economic opportunities has increased substantially in recent years, and this increase has only added to the pressure on Utah's affordable housing market.

The rising demand for housing of all types makes maintaining an adequate supply of affordable housing both an imperative and a complicated issue for Utah's policymakers. It is complicated because it requires a set of strategic policies that balance the myriad competing interests of low-income households, property owners, state and local governments, developers and many others. Furthermore, some Utahns contend on ideological grounds that any government interaction is an overreaction to temporary economic conditions because they assume that local housing markets function well and will gradually correct themselves if left alone. On the other hand, some Utahns advocate for more affordable

housing, but then oppose its development in their own neighborhoods. Regardless of affordable housing's complexity, two points are certain. First, Utah's demand for more affordable housing has not diminished and it is unlikely to do so in the near future if the state's population of low- to moderate-income households continues to grow. Second, the availability of affordable housing throughout Utah has public and private interests concerned, but it will require their cooperation to find long-term, equitable solutions.

Utah's rate of residential construction is among the highest in the country, but the types of housing being built may not be serving the intended households nor those with the greatest need for affordable housing. Modest-income families are a large and rapidly growing segment of Utah's population and need affordable housing the most now, but our state's housing shortage increasingly affects all income levels. Building more single-family, detached homes on large lots will certainly benefit middle and upper income families now, and possibly alleviate some pressure at the top, but as long as we continue to see a rising demand for affordable housing, the longer it will take before those benefits to trickle down to households with modest incomes, if at all. To avoid perpetuating the mistakes that created the state's affordable housing gap, we must now look to long-term, intermediate-term, and immediate solutions. We must also take a multipronged approach, using more than one strategy to promote affordable housing at all income thresholds.

Real issues will need to be addressed before more effective housing strategies can be employed. The most effective strategies to ensure an adequate supply of affordable housing for all income thresholds will incorporate public-private partnerships and intergovernmental collaboration. Innovative strategies that promote public-private partnerships and intergovernmental collaboration must continue to play a key role in addressing the issues of affordable housing production, but there is still much more that can and should be done. To help state and local policymakers address the growing housing gap, this assessment offers the following questions to help them frame more effective housing strategies:

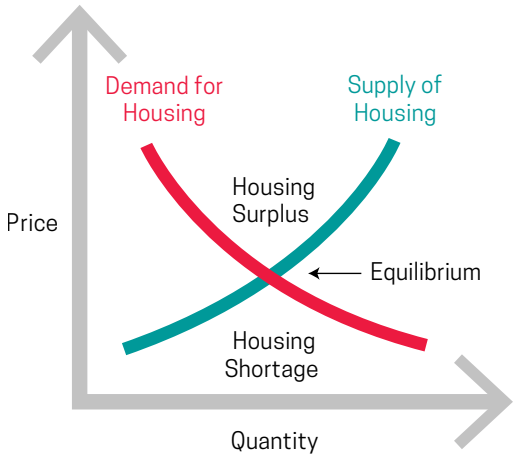
- What is driving the demand for affordable housing in Utah?
- What is the state of Utah's housing stock?
- How affordable is Utah's housing stock, and for whom is it affordable?
- To what extent is the state's supply of affordable rental housing units actually available to households with modest incomes?
- Are the units that are currently affordable and available to lower-income renters likely to remain so in the future?
- When a local housing strategy includes an increase in rental housing supply, is local planning capacity sufficient to take advantage of opportunities and meet challenges?

2. AN OVERVIEW OF UTAH'S HOUSING DEMAND

KEY POINTS:

- Supply and demand determine the price and quantity of housing in a competitive market.
- Demographics and tenure (owning vs. renting) are strongly related to housing demand.
- Natural growth and migration are driving Utah's growing housing demand.
- Utah's strong economy influences economic migration.

Figure 1: Supply of and Demand for Housing Framework



Economists use a basic framework to explain imbalances between the supply of and demand for housing. This framework is typically depicted on a graph with a vertical price axis, a horizontal quantity axis and two curved lines that form an "X," as shown in **Figure 1**. A point on the demand curve indicates the quantity of housing units that demanders are willing to buy for a given price. A point of the supply curve indicates the price at which suppliers are willing to produce a given quantity of housing units. The point at which the two curved lines converge is the equilibrium price and quantity of housing that is likely to prevail in a competitive market.

The first two laws of housing demand are 1) As the price of ownership increases, people will increasingly choose to rent a home rather than buy, and 2) As the price of ownership decreases, people will increasingly choose to buy a greater number of units. But, it is more likely that they will choose to buy a higher quality housing unit with better amenities. In general, the first law of housing demand is more important to our discussion of Utah's affordable housing gap. If housing costs become cheaper, more people will decide that they can afford to buy a home, then the demand for homeownership increases. However, if the cost of homeownership increases, then the demand for rental units increases. The second law of demand is not the primary cause of Utah's affordable housing shortage, but it does aggravate the problem. It must be mentioned because second homes and recreational units effectively remove a surprisingly large share of new units from the state's pool of available residential units each year.

The second law of demand is not the primary contributor to Utah's housing shortage largely because only a few people have the means to buy additional housing units. So for most people, as housing prices decrease, the more amenities a homebuyer can afford to buy. Likewise, the lower the rent, the more likely it is that a renter will rent a unit with better amenities. Amenities may include more rooms, a larger yard, proximity to work, etc. Units with more amenities tend to be on the higher end of the demand curve. Problematically, renters are more likely to remain renters if the units they can afford to rent provide better amenities than the units they could tentatively afford to buy such as being located close to one's place of work.

Demand for housing is not static. A shift in the demand curve to the right generally makes housing less affordable while a shift to the left may improve its affordability. The demand curve can shift to the right or to the left for a number of reasons. A shift to the right may be caused by an overall increase in household income in a housing market. It may also shift right if mortgage interest rates decrease. On the other hand, concerns about the economy may cause the demand curve to shift to the left. But, a reduction in the average cost of renting can shift the curve to the left too. Changes in a housing market's population can also shift the demand curve to the right or to the left.

Population change is a primary driver of housing demand. As the state's overall population increases, the number of households are expected to rise. The 2012-2016 American Community Survey estimated that the average household in Utah has 3.15 people. Based on the linear trends, Utah has been adding almost 45,031 people in 10,997 households each year since 2009.

Natural population growth is a significant contributor to Utah's need for more housing units, but it is not the sole determinant of housing demand. Adding a new household to any region creates more demand for additional housing units regardless of whether the demand is derived from natural increase or through migration. Regional economics and other industrial factors often prompt economic migrations that affect local housing demand. Nonetheless, in a well-functioning market, the housing supply should increase at a rate that closely corresponds with its growth in households.

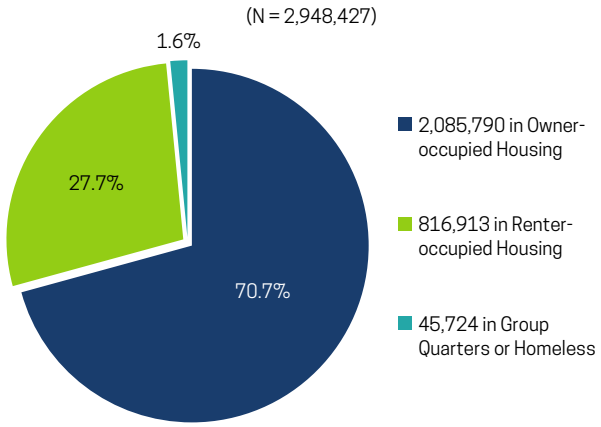
UTAH'S POPULATION

Demography is the study of populations and demographics that describe the composition of those populations. Demographers conduct demographic analyses to draw conclusions about a population's growth, migration patterns, and its distribution of gender, age, race and ethnicity as well as education and income. Demographic information allows governments to plan for the public goods and services they provide. Policymakers utilize demographic analyses to better understand the populations living within their jurisdiction. Segmenting a population according to demographics helps them to identify specific needs within their jurisdiction and to develop policies that target those needs. Demographic indicators also help governments determine whether its programs are effective.

Real estate brokers, developers and construction firms also utilize demographic information for economic market research purposes. These statistics represent significant factors that affect how real estate is priced and what types of properties are in demand. Major shifts in the demographics of a region can have a large impact on local markets and produce trends that last for years and even decades.

According to the 2012-2016 American Community Survey (ACS), 2,948,427 people lived in Utah, as shown in **Figure 2**. Approximately 1.6 percent of the estimated population (45,724) lived in institutional group quarters such as adult correctional facilities, juvenile facilities, skilled-nursing facilities, other institutional facilities, hospitals and in-patient hospice facilities, or were experiencing homelessness. The remaining 2,902,703 residents of Utah lived in 918,367 households. Of those households, 69.6 percent (638,767 households) were owner households while 30.4 percent (279,600 households) were renter households. This means that 70.7 percent of the state's total population (2,085,790) lived in owner-occupied housing and 27.7 percent of the population (816,913) were part of a renter household. Population change, population growth and its increasing concentration in metropolitan areas are contributing to the overall demand for more affordable housing, especially more rental housing units for households with modest incomes.

Figure 2: How Utah's Population Was Housed in 2016



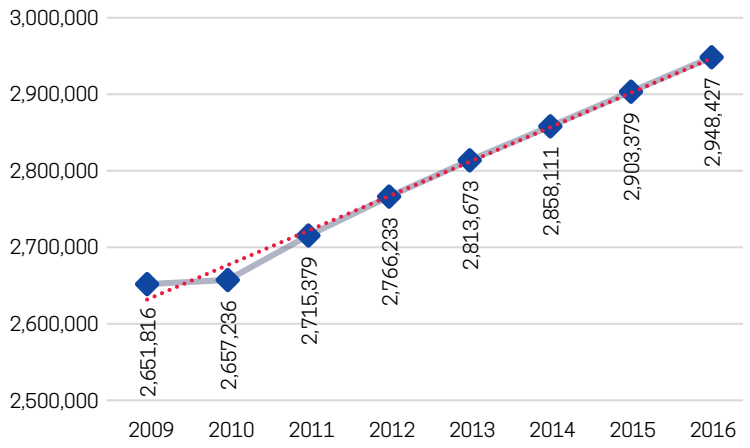
Source: USCB. (2017). Tables B01003 & B25008: 2012-2016 ACS [Data]

POPULATION GROWTH

KEY POINTS:

- Utah's population grew by 296,611 people and 86,804 households between 2009 and 2016.
- On average, natural growth contributed 42,653 people to Utah's population each year.
- On average, net migration contributed 7,395 people to Utah's population each year.

Figure 3: Utah's Estimated Population Growth



Source: USCB (2009to 2016) Table: B01003, American Community Survey 5-yr. Exstimates [Data]

When compared with the national average annual growth rate of 0.799 percent per year between 2009 and 2016, Utah's population has grown more than twice that rate at 1.53 percent per year. Yet at the county level, there was great variation in population growth during this period. Like the nation as a whole, metropolitan counties such as Salt Lake County (92,219), Utah County (59,187), and Davis County (42,790) experienced the greatest overall population growth. In fact, these three counties accounted for 65.5 percent of the 296,611-person growth in Utah. However, Wasatch County (4.65 percent per year), Morgan County (3.49 percent per year) and Uintah County (3.27 percent per year) proportionately grew the fastest. Rural counties such as Beaver County (0.69 percent per year), Emery County (0.23 percent per year) and Grand County (0.05 percent per year) grew at the slowest rates over that period. Indeed, a handful of non-metropolitan counties experienced a substantial population decline at the beginning of the decade, but most have seen some growth in the latter half of the decade. The only county to consistently lose population between 2009 and 2016 was Daggett County (-0.20 percent per year).

Housed Population and Household Growth by Tenure

KEY POINTS:

- Tenure categorizes the occupants of a housing unit as either members of a household that owns the unit in which they live or as members of a household that rents the unit in which they live.
- By necessity this report focuses on the population and households living in owner-occupied or renter-occupied housing units.
- For more information on people experiencing homelessness, please refer to Utah's Annual Homelessness report, which is also published by the Utah Housing and Community Development Division.

Tenure classifies a housing unit's occupants as either owners or renters.[5] Unfortunately, the U.S. Census bureau provides very limited data on people living in group housing or experiencing homelessness. Consequently, the analyses throughout this report are based on owner-occupied or renter-occupied housing units with a physical address. Comparing **Figure 3** and **Figure 4**, one finds that both the state's overall population and the population not living in group quarters, or experiencing homelessness, are proportionally rising at an average annual growth rate of 1.5 percent per year, but there is an average difference in growth of 289 people per year. As shown in **Figure 2**, 98.4 percent of Utahns lived in a household that either owned or rented a housing unit in 2016. On average, 72.9 percent of Utahns lived in owner-occupied housing whereas 27.1 percent lived in renter-occupied housing. Although the majority of Utahns live in an owner-occupied home, that number is only increasing by 20,784 people per year. In contrast, the number of Utahns living in renter-occupied housing is increasing by 23,959 people per year.

Growth of Utah's Owner Households

Figure 4: Growth in Utah's Housed Population by Tenure

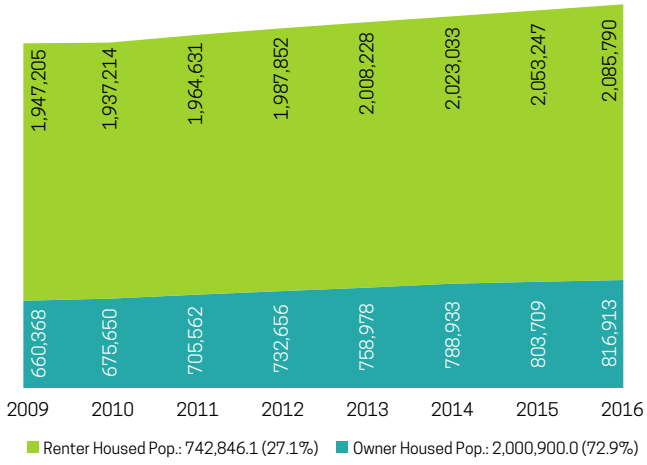
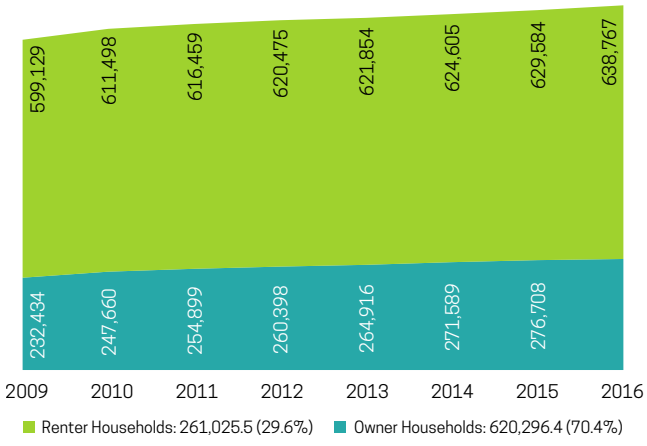


Figure 5: Growth in Utah's Households by Tenure



Source: USCB (2009 to 2016) Table: B01003, American Community Survey 5-yr. Exstimates [Data].

Due to the propensity of populations to cluster in urban centers, the majority of Utah's owner-occupied housing units are in metropolitan counties. Although renter-occupied housing has had a faster growth rate in recent years, in terms of raw numbers, owner-occupied housing units far exceed rental units in every county in Utah. On average, between 2009 and 2016, there were 620,296 owner-occupied housing units in Utah. 79.2 percent of Utah's owner households lived in just five of the state's 29 counties. The five counties with the largest portion of Utah's owner households were:

1. Salt Lake County, 37.3 percent
2. Utah County, 15.6 percent
3. Davis County, 11.8 percent
4. Weber County, 9.2 percent
5. Washington County, 5.3 percent

After controlling for the size of each county's population of households, the five counties with the highest concentration of owner households per 1,000 total households were:

1. Morgan County, 870.9 owners per 1,000 households
2. Piute County, 862.8 owners per 1,000 households
3. Rich County, 829.2 owners per 1,000 households
4. Wayne County, 815.5 owners per 1,000 households
5. Emery County, 810.8 owners per 1,000 households

When one considers each county's average annual growth rate adjusted for owner households per 1,000 total households, the five counties that grew the fastest were:

6. Daggett County, 5.86 percent per year
7. Wayne County, 1.03 percent per year
8. San Juan County, 0.55 percent per year
9. Iron County, 0.47 percent per year
10. Kane County, 0.30 percent per year

Growth of Utah's Renter Households

Utah's renter households are more heavily concentrated in urban areas, which reflects both their larger populations and the higher propensity to rent in these areas. However, the fastest growth in renter households in recent years has been in more rural counties, considering relative population size.

Between 2009 and 2016, on average there were 261,025 renter households in the State. 81.9 percent of Utah's renter households lived in just five of the state's 29 counties. These five counties are:

1. Salt Lake County, 42.8 percent
2. Utah County, 17.2 percent
3. Weber County, 8.4 percent
4. Davis County, 8.0 percent
5. Washington County, 5.4 percent

After controlling for the size of each county's population of households, the five counties with the highest concentration of renter households per 1,000 total households were:

1. Iron County, 371.0 renters per 1,000 households
2. Cache County, 355.6 renters per 1,000 households
3. Salt Lake County, 325.3 renters per 1,000 households
4. Utah County, 317.0 renters per 1,000 households
5. Grand County, 312.0 renters per 1,000 households

When one considers the average annual growth rate of each county in terms of renter households per 1,000 households, the five counties that grew the fastest were:

1. Rich County, 11.19 percent per year
2. Sanpete County, 6.47 percent per year
3. Morgan County, 6.22 percent per year
4. Garfield County, 6.12 percent per year
5. Beaver County, 6.02 percent per year

Natural Increase and Dependency Rate

High Birthrate and Long Life

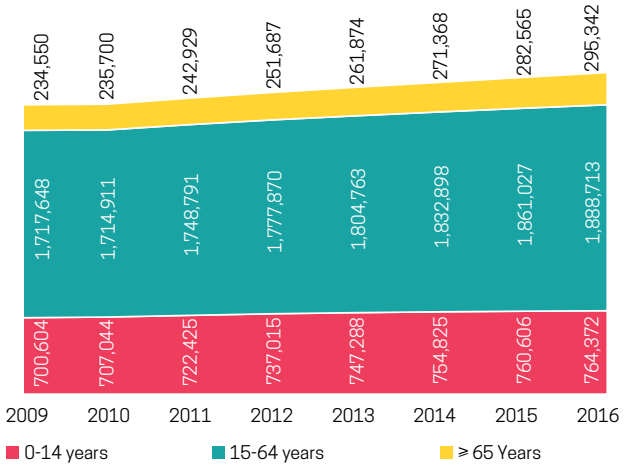
Utah's population marries younger, has a higher birthrate, and has a longer than average life expectancy, which are three of the many factors contributing to the state's rising demand for rental housing. With a median age of 30.3 years old, Utahns were 7.4 years younger than the nation. As measures of household formation, Utahns are more likely to marry and have children at a younger age than the rest of the nation. 70.4 percent of Utah's 2016 population over the age of 15 had been married at least once, compared to 67.0 percent nationally.

While both Utah's and the United States' birthrate for women between 20 and 34 years old has declined between 2009 and 2016, Utah's birthrate has declined at a slower pace than the nation, at 0.97 percent per year compared to the national 1.74 percent per year. This relatively high birthrate also helps to explain the state's lower than average age.

The number of Utahns living past age 64 has grown by 2.64 percent per year, from 149,958 senior citizens in 1990 to an estimated 295,342 in 2016. The Journal of the American Medical Association reported that in 1990, the average Utahn could expect to live 77.9 years, compared to 75.5 years nationally; but as of 2016 the typical Utahn can expect to live 79.6 years, compared to 78.9 years nationally. Considering both a high birthrate and a long life expectancy, Utah's natural growth rate is likely to contribute to the state's housing demand well into the foreseeable future.

As stated earlier, there were 918,367 households in Utah, and that there were 1,814,121 non-institutionalized people between 16 and 64 years old who were participating in the labor force. On average then, each household should have

Figure 6: Population Growth in Utah's Age Groups Over Time



Source: USCB. Table: B01001: Age & Sex, American Community Surveys, 2009 thru 2016 [Data].

approximately 1.98 people participating in the labor force. The average household in Utah also had 3.15 people. There are 1.57 household members for every one person participating in the labor force.

Using a dependency ratio is necessary for estimating employment and housing needs based on projected population growth in a given area. A dependency ratio is the sum of the number of children under age 15 and adults over age 64, divided by the total number of adults ages 15 to 64 in an area, times 100.[6]

Figure 6 provides a visual distribution of the three dependency-determinate age groups. On average, working age adults comprise 64.1 percent of Utah's population while children under age 15 and adults over age 64 represented 35.7 percent. With a 3.35 percent average annual growth rate, people over 64 are Utah's fastest growing segment and is expected to add 8,993 people per year. In contrast, people under 15 grew the slowest at 1.25 percent per year. Working age adults added the most population in quantity: 26,277 people per year. Although Utah added 9,781 children under age 15 each year, on average, their relative proportion to the total population has remained closest to its average of 26.4 percent with the least deviation (SD=0.164 percent).

The ratios discussed above are important to understand because they have ramifications for an area's housing demand and employment needs—therefore they should not be overlooked. When employment in an area increases by two employees, one could expect that community's housing needs to increase by one additional unit. As **Table 1** shows, Utah's average dependency ratio was 55.5:100, and its inverse was 1:1.8 people. Utah's population increased by an estimated 251,396 people between 2009 and 2016, which suggests that the number of working age adults, ages 15-64 years, increased by approximately 140,000 people. It also suggests that the approximate number of new households grew by 80,000 during the same period.

Table 1: Average Household Size, Workers Per Household Dependency Ratio, and Inverse Dependence Ratio in Utah, 2009-2016

	2009	2010	2011	2012	2013	2014	2015	2016	Average	AAGR
Average Household Size	3.14	3.04	3.06	3.09	3.12	3.14	3.15	3.16	3.11	0.06%
Workers Per Household	2.01	1.95	1.96	1.97	1.98	1.99	2.00	2.01	1.98	-0.09%
Dependency Ratio Per 100 Working Age Adults	54.4	55.0	55.2	55.6	55.9	56.0	56.1	56.1	55.5	0.49%
Inverse Dependency Ratio Per Working Age Adults	1.84	1.82	1.81	1.80	1.79	1.79	1.78	1.78	1.80	-0.48%

Source: USCB. Table: B25003: Tenure. American Community Surveys, 2009 thru 2016 [Data].
Source: USCB. Table: S2303: Work status past 12 months. American Community Surveys, 2009 thru 2016 [Data].
Source: USCB. Table: B01001: Age and sex. American Community Surveys, 2009 thru 2016 [Data].

Migration

KEY POINTS:

- Net migration growth contributes less than natural growth to Utah's overall population growth.
- Utah's population has grown by 7,395 people per year from net migration.
- Between 2010 and 2016, Utah's population grew by a total of 51,768 people from net migration.
- The majority of households that migrated to Utah in the last year were renters.

Table 2: Total Number of People Who Migrated to Utah from Another State by Age Group, 2010-2016

Age Group	Freq.	Pct.
1-17 years	151,133	24.2%
18-24 years	183,107	29.3%
25-29 years	75,412	12.1%
30-34 years	53,326	8.5%
35-39 years	35,018	5.6%
40-44 years	25,727	4.1%
45-49 years	22,827	3.7%
50-54 years	18,537	3.0%
55-59 years	17,519	2.8%
60-64 years	12,585	2.0%
65-69 years	11,147	1.8%
70-74 years	5,948	1.0%
≥ 75 years	11,913	1.9%
Total	624,199	100.0%

Source: USCB (2017) Table B07001: 2012-2016 American Community Survey. [Data]

Utah's economy has been remarkably resilient to the lingering aftershocks of the recession, and it has remained among the most prosperous states in the nation. As can be expected, economic opportunities tend to promote economic migration. Economic migrants are people who seek to improve their standard of living by resettling in another region because of the limited job opportunities or a high cost of living in their region of origin. ***While migration from state-to-state has contributed significantly to Utah's population growth, the majority of the state's growth is from natural growth.***

The state's strong economic recovery from the recession increased employment oppurtunities by 193,699 jobs between 2009 and 2016. This job growth corresponds with a net population growth of 296,611 people, and 86,804 newly occupied housing units according to estimates from the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS). In other words, for every 10,000 newly employed people, over this period, the state's total population grew by 15,313 people. Also, for every 10,000 newly employed people, the number of occupied housing units increased by 4,481 units. Although limited available data make it difficult to say exactly what proportion of new jobs were filled by economic migrants to Utah, it is reasonable to assume that a sizable portion were.

People relocating to Utah has increased the state's overall population by 51,768 people, but it is actually a lesser contributor to the housing shortage than natural growth. In the past year, as shown in **Table 3**, an estimated 94,789 people moved to Utah. According to the U.S. Census Bureau's American Community Survey records, between 2010 and 2016, Utah added 89,171 new residents each year, on average. Of those migrants, 71.1 percent were working-age adults between 18 and 64 years old. However, one-year migration estimates for 2016 indicated that Utah also lost 85,803 residents. Using annual state-to-state migration flows, Utah also lost an average of 81,776 residents each year, as shown in **Table 3**. This points to a population increase of 7,395 people per year, on average, from state-to-state migrations, viz. 51,768 people between 2010 and 2016.

It is also interesting to note that the majority of householders that migrated to Utah in the last year were renters. Each head of household roughly equals one household. From a sample of 87,233 migrant householders only 38.7 percent (33,717) were homeowners. 61.3 percent (53,516) of migrant householders were renters.

Table 3: Net Growth from Migrations to and from Utah, 2010-2016

	2010	2011	2012	2013	2014	2015	2016	Average	Total
In Migration	91,908	88,528	85,402	85,894	86,795	90,883	94,789	89,171	624,199
Out Migration	75,541	73,211	82,165	91,943	79,697	84,071	85,803	81,776	572,431
Net Growth	16,367	15,317	3,237	-6,049	7,098	6,812	8,986	7,395	51,768

Source 1: USCB: Table B07001: American Community Survey, 2010 thru 2016. [Data]
Source 2: USCB: State-to-state migration flows, 2010 thru 2016. [Data]

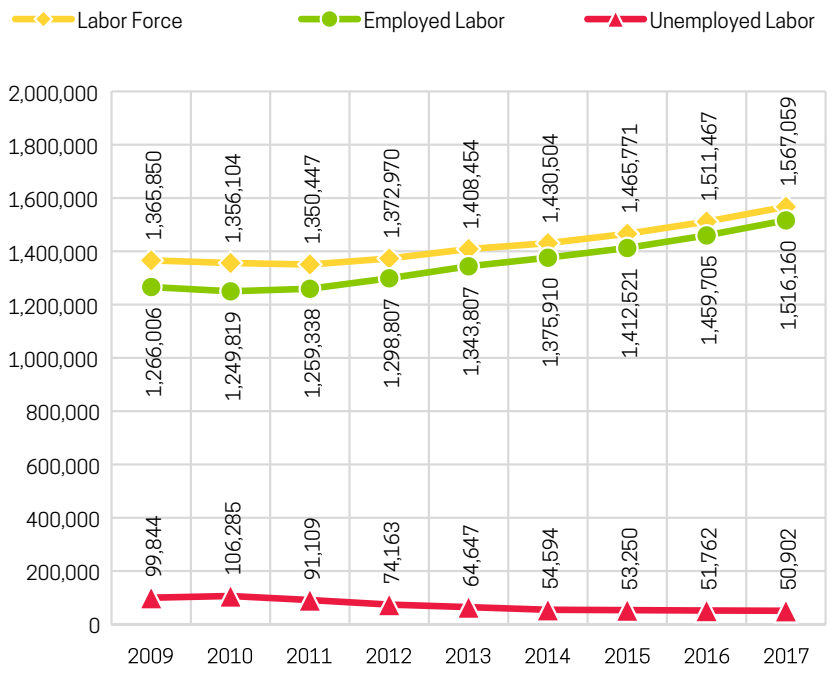
ECONOMIC GROWTH

KEY POINTS:

- The distribution of industrial establishments and employment by sector provide indications of the type and quantity of housing that a community needs.
- Over time, a growing industry will generally contribute more employment opportunities to a local economy than a fading industry.
- Communities with diverse economies are not only more resilient to market fluctuations, but they also tend to see greater employment growth, which translates into increased housing demand.
- There is a need for local planning endeavors to promote residential development of affordable housing for workers in the area's predominant industries and housing for workers in growing industries.

Income is a key determinant of housing affordability, and so it is vital to understand the sources of income of Utah's households. This report is not intended to be an extensive analysis of Utah' s industries, but the allocation of employment by goods-producing and service-providing sectors and the relative wage of their employees have significant effects on Utah's economy that affect the affordability of housing for different income groups. Local economies are also greatly affected by the number of people employed in local industries and the wages they earn. Likewise it is important to understand how industrial growth and contraction affects employment rates and then how changes in the employment rate affects affordable housing needs in an area. Understanding the changing composition of local industries, employment in those industries, and typical employee wages helps communities plan for the changing affordable housing needs of their workforce.

Figure 7: Employment in Utah, 2009-2017

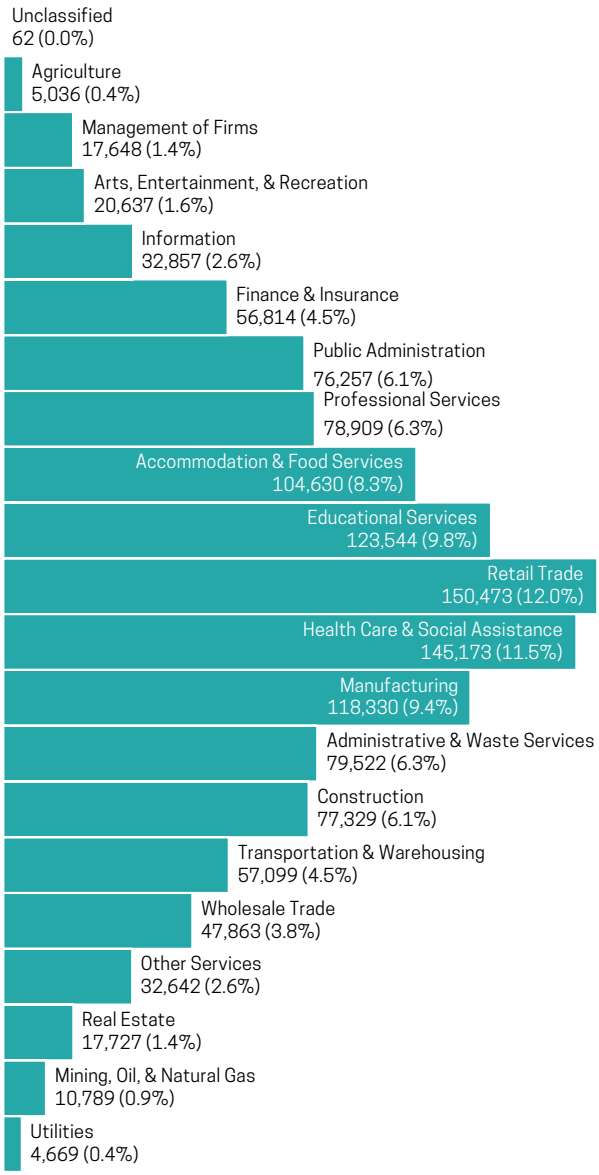


Source: BLS :Local Area Unemployment Statistics, 2009 thru 2017. [Data].

Since 2009, employment growth and population growth have been correlated in Utah's counties. This study, therefore, assumes that counties that are experiencing employment growth are likely growing in overall population, and vice versa. As discussed earlier in this report, population growth increases the demand for housing. **Figure 7** uses Bureau of Labor Statistic's Local Area Unemployment Statistics (LAUS) data to estimate the growth of Utah's labor force, annual employment growth and decline in unemployment. It shows that Utah's labor force is growing at 1.5 percent per year. This may account for the declining unemployment rate, and it likely indicates that workers from other states are migrating to Utah for employment opportunities, which places greater demand on the existing supply of housing.

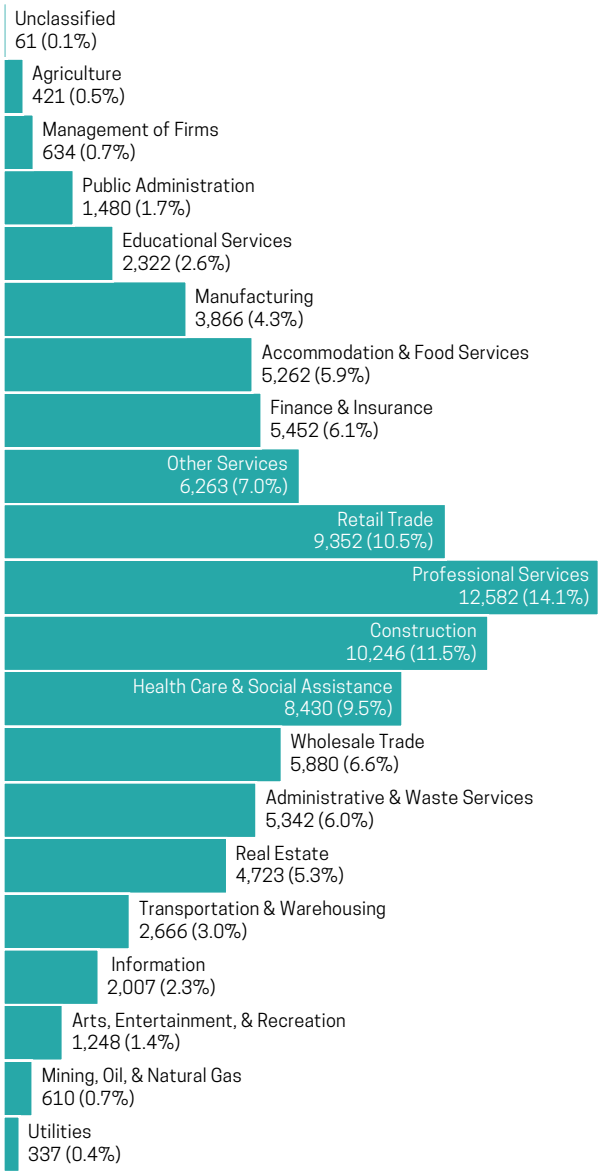
Collocating housing and jobs allows people to live close to their workplace, which reduces overall congestion, transportation costs and vehicle emissions. Urban and regional planners have long promoted the benefits of a housing cost to income "balance" and a housing type to jobs "fit" within local areas. Ensuring an approximate balance of housing cost and local income is important for maintaining overall housing affordability for all members of a community, since imbalances in the supply of housing relative to high demand inevitably results in unaffordable housing for low-income households. However, housing mismatches are also likely to occur if the quality and character of housing units in an area do not "fit" the expectations of the types and wages of employment dominating that area.

Figure 8: Average Distribution of Employment in Utah by Industry (N = 1,258,006)



Source: BLS : QuartelyCensus of Employment and Wages, 2009 thru 2017. [Data].

Figure 9: Average Distribution of Establishments in Utah by Industry (N = 89,183)



Source: BLS : QuartelyCensus of Employment and Wages, 2009 thru 2017. [Data].

There is a need for local planning endeavors to promote residential development of affordable housing for workers in the area's predominant industries and housing for workers in growing industries. Over time, growing industries will increasingly constitute a larger share of a local economy than fading industries, which will result in changing housing needs. **Figure 8** and **Figure 9** depict Utah's average distribution of employment and the distribution of employers, i.e. establishments by industrial category. According to **Figure 8**, Utah's largest segment of employees is in the retail trades industry, while the largest segment of employers are in the professional and technical services industries, as seen in **Figure 9**. Workers in these two industries have very different housing needs and expectations.

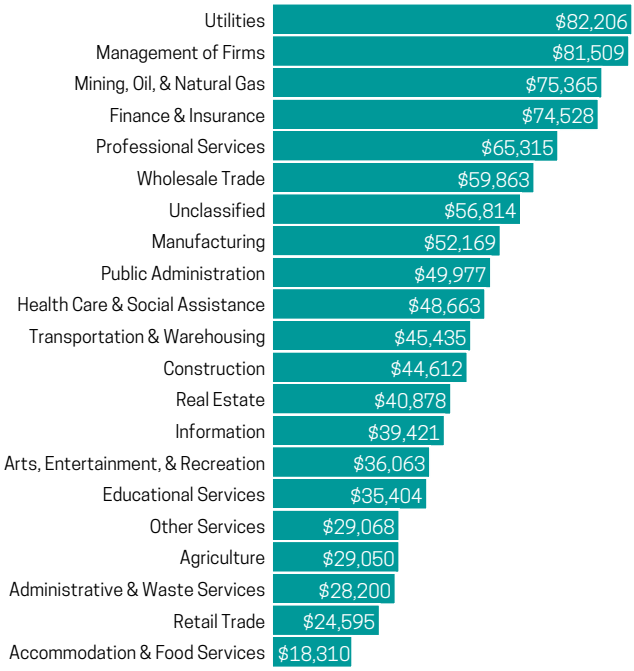
Table 4: Average Annual Growth Rate Of Establishments and Employment Per 10,000 Utahns By North American Industry Classification System Category

NAICS Category	Establishments	Employment
Naics 11 Agriculture	1.50%	1.78%
Naics 21 Mining, Oil, & Natural Gas	-0.92%	-4.19%
Naics 22 Utilities	0.78%	-4.78%
Naics 23 Construction	-2.64%	2.36%
Naics 31-33 Manufacturing	-0.36%	0.06%
Naics 42 Wholesale Trade	-1.50%	-0.08%
Naics 44-45 Retail Trade	-0.07%	0.67%
Naics 48-49 Transportation & Warehousing	-0.03%	1.07%
Naics 51 Information	2.42%	1.70%
Naics 52 Finance & Insurance	-1.15%	0.52%
Naics 53 Real Estate	-0.37%	0.50%
Naics 54 Professional Services	2.95%	3.46%
Naics 55 Management of Firms	5.15%	-0.84%
Naics 56 Administrative & Waste Services	0.37%	3.23%
Naics 61 Educational Services	1.28%	1.17%
Naics 62 Health Care & Social Assistance	4.52%	1.83%
Naics 71 Arts Entertainment & Recreation	1.69%	2.30%
Naics 72 Accommodation & Food Services	0.61%	1.54%
Naics 81 Other Services	-2.60%	0.02%
Naics 92 Public Administration	-1.91%	-1.43%
Naics 99 Unclassified	12.59%	8.81%
Total	0.21%	1.07%

Source 1: BLS: Quartely Census of Employment and Wages, 2009 thru 2016 [Data].
Source 2: USCB: American Community Survey, 2009 thru 2016 [Data].

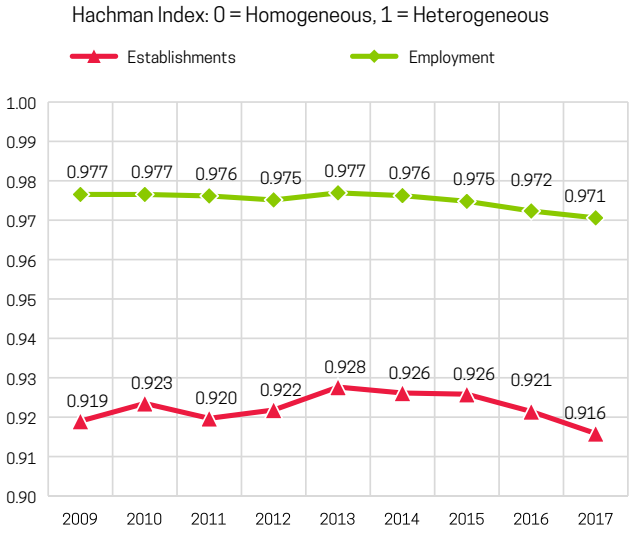
In terms of raw numbers, Utah experienced a 1.74 percent increase in establishments per year between 2009 and 2017 and a 2.62 percent rise per year in employment according to The Bureau of Labor Statistic's Quarterly Census of Employment and Wages (QCEW). **Table 4**, however, shows the average annual growth rates of Utah's industries adjusted for industry size, using the number of establishments and employment per 10,000 Utahns. Excluding the unclassified category, it shows that establishments managing firms is the industry growing the fastest at a rate of 5.15 percent per 10,000 Utahns annually. In contrast, at 3.46 percent per year, employment in professional services is growing the fastest per 10,000 Utahns.

Figure 10: Average Annual Wages in Utah by Industry



Source: BLS : Quartely Census of Employment and Wages, 2009 thru 2017. [Data].

Figure 11: Utah's Industrial Diversity, 2009-2017



Source: BLS : Quartely Census of Employment and Wages, 2009 thru 2016. [Data].

As shown in **Figure 10**, the average annual wage of a worker in a retail trade is only $24,595 per year, while the average wage in professional and technical services is $65,315. People working in professional services can afford higher priced housing, but there are 1.91 times as many employees in retail trades that need more affordable housing (see **Figure 8**). Housing both sectors in one community can be challenging because lower-income workers in retail trade need a 'balanced' distribution of housing costs within their income range, while workers in professional services want a distribution of housing that 'fits' their expectations in terms of type, quality and amenities.

Diversity of industrial establishments and employment opportunities are positively associated with regional population growth, and therefore higher industrial diversity is often associated with a higher demand for affordable housing. Just as an investment manager advises their clients to diversify their investment portfolio, communities with high industrial diversity are less vulnerable to single industry fluctuations in the market and recessions in general. To measure employment diversity and establishment diversity in Utah and its counties, this assessment utilized the Hachman Index (HI) to compare local distributions of establishments and employment, according to the North American Industrial Classification System, to the United States' distribution of industries. The Hachman Index measures diversity on a scale of 0 to 1. Communities with a homogeneous local economy, i.e. lacking industrial diversity, have HI values close to 0, while those with values closer to 1 have a more varied economic base. Compared to the U.S., the State of Utah's diverse employment opportunities are among the highest in the nation, with an average score of 0.97 (U.S. = 1), as shown by **Figure 11**.

Utah's economy also has a high diversity of establishments compared to the nation with an average score of 0.91 (U.S. = 1). As shown in **Table 5**, at the county level employment diversity varies: Duchesne County scores a 0.09, while Salt Lake County scores a 0.94. In terms of establishment diversity, Weber County scores 0.91 and Duchesne County scores 0.12. Unsurprisingly, Duchesne County, Daggett County, Uintah County—counties with low establishment diversity—saw some of the largest swings in population following the recession. In general, urban counties have more diverse economies while rural counties are more dependent on fewer industries.

In addition to displaying the average Hachman Index value of establishments and employment in each of Utah's counties, Table 5 provides the slope of a linear trend for industrial economic diversity for counties between 2009 and 2017. Trends highlighted in red indicate a negative trend, which suggests declining diversity in either establishments or employment in that county. Between 2009 and 2017, 16 of 29 (55.2 percent) of Utah's counties either experienced a decline in establishment diversity or a decline in employment diversity, and 11 counties (37.9 percent) with a decline in both. The majority of these counties are classified by the U.S. Office of Management and Budget as being non-metropolitan, or generally rural. Counties with declining industrial diversity are less likely to see an overall rising demand for all types of housing but may be in greater need of more affordable rental housing for households with modest incomes, as the variety and number of employment opportunities become scarcer.

Table 5: Hachman Index of Industrial Diversity in Utah's Establishments and Employment by County, 2009-2017

	Establishments		Employment	
Counties	Average HI	Slope	Average HI	Slope
Beaver	0.435	-0.018x	0.140	0.003x
Box Elder	0.705	-0.004x	0.587	0.010x
Cache	0.879	0.004x	0.703	0.002x
Carbon	0.659	-0.008x	0.225	0.001x
Daggett	0.159	0.002x	0.220	0.003x
Davis	0.909	0.001x	0.810	-0.005x
Duchesne	0.123	-0.003x	0.091	-0.003x
Emery	0.317	-0.005x	0.204	-0.006x
Garfield	0.383	-0.005x	0.328	-0.001x
Grand	0.564	-0.002x	0.454	-0.004x
Iron	0.839	0.004x	0.884	-0.004x
Juab	0.576	-0.003x	0.326	-0.006x
Kane	0.574	-0.002x	0.357	-0.001x
Millard	0.421	-0.002x	0.263	0.003x
Morgan	0.642	0.007x	0.508	-0.006x
Piute	0.178	-0.005x	0.229	-0.009x
Rich	0.340	0.005x	0.433	0.000x
Salt Lake	0.888	-0.002x	0.936	-0.005x
San Juan	0.369	0.006x	0.312	0.016x
Sanpete	0.562	-0.005x	0.702	-0.009x
Sevier	0.671	-0.001x	0.345	-0.005x
Summit	0.773	-0.001x	0.397	0.003x
Tooele	0.849	0.003x	0.636	0.012x
Uintah	0.130	0.001x	0.112	0.008x
Utah	0.887	0.000x	0.868	-0.009x
Wasatch	0.774	0.008x	0.662	0.005x
Washington	0.858	0.003x	0.839	-0.003x
Wayne	0.382	-0.003x	0.495	-0.004x
Weber	0.908	0.002x	0.852	0.001x

Source: BLS (2018) Quartely Census of Employment and Wages, 2009 thru 2017 [Data].
Note 1: Hachman Index scale: 0 = Homogeneous, 1 = Heterogeneous.
Note 2: Red indicates a negative slope or a declining diversity trend from 2009 to 2016.
Note 3: Green indicates the top 3 diverse economies, Yellow indicates the bottom 3.

3. AN OVERVIEW OF UTAH'S HOUSING SUPPLY

KEY POINTS:

- Supply and demand determine the price and quantity of housing in a competitive market.
- A housing unit is a house, apartment, mobile home or trailer, group of rooms, or single room that is occupied, or, if vacant, is intended for occupancy as separate living quarters.
- The U.S. Census Bureau estimates that Utah may have more housing units than occupied housing units. However, over two-thirds of vacant units are not available to rent or to own as a primary residence.
- Construction lag is the time it takes for developers to plan, finance and build housing units. It is the reason that planning ahead for future housing needs is so important.
- A variety of housing options is not only more sustainable but it improves the overall affordability of housing.
- Filtering is the process in which aging housing units become more affordable for lower-income households over time, and newer units with better amenities entice households with higher-income to move out of older units.
- The "fit" between jobs and housing in a region is as important as the "balance" between housing costs and income.

The law of housing supply is as important as the laws of housing demand. The law of housing supply asserts that when the price of housing units increases, the quantity of units supplied will also increase, and when prices decrease, the quantity of units produced will decrease. For example, the law of supply predicts that when the cost of housing rises, housing developers are likely to produce more housing units in order to maximize their profits. Whereas the demand curve depicted a negative association, or inverse relationship, between price and quantity, the supply curve represents a positive association between quantity and price. The supply curve is typically portrayed as an upward slopping curve (see **Figure 1**).

When discussing Utah's housing supply, it is necessary to explain two broader supply concepts: 1) The long-run housing supply, and 2) The short-run housing supply. As the name implies, the long-run housing supply is the relationship between housing prices and the total number of housing units over time. It is one of the primary objectives of assessing housing affordability year after year. However, due to the difficulty of measuring it directly, and the limitations of our data, our analysis must necessarily focus on the short-run aggregate supply. The short-run housing supply simply refers to the state's total housing stock at a given point in time.

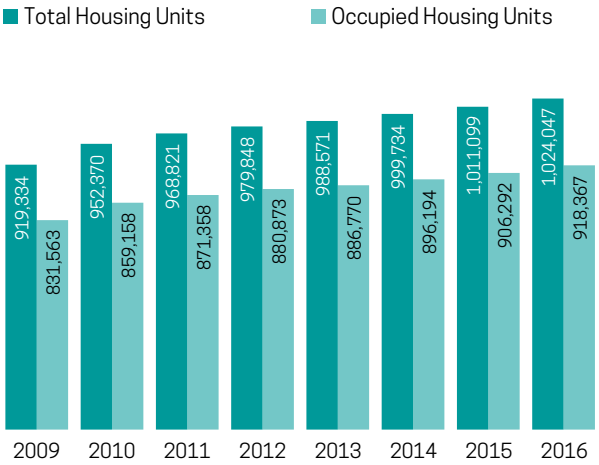
It is crucial to understand that construction lag is an important factor in the state's short-run housing supply. Construction lag is the time that it takes for developers to plan, finance and build housing units. Construction lag can be as short as several months for small projects but can be as long as several years for large scale projects. In other words, State and local housing interventions must account for construction lag in order to develop an adequate supply of housing for their growing population—this usually entails planning several years in advance.

HOUSING SUPPLY INVENTORY

Utah's total supply of housing has been increasing by 13,430 housing units per year on average according to estimates provided by the U.S. Census Bureau's American Community Survey. But, the number of housing units being occupied is increasing by 10,997 units on average. The difference in average growth in production and household formation indicate that Utah's total housing shortage is expected to narrow by 2,433 units per year at the current rate of development. In addition to the 0.13 percent difference in average annual growth rates being negligible, the fact that these new units are expected to follow a similar vacancy distribution as the state constrains this boon considerably.

Aggravating the housing shortage is the apparent mismatch between the demand for rental units versus private units and the types of units actually being supplied. For example, 54.3 percent of all new households each year were new renter households between 2009 and 2016, but the supply of rental housing has not kept pace. In fact, the number of owner-occupied units grew at an overall rate of 0.92 percent per year, while renter-occupied units grew at 2.69 percent per year. Accounting for differences in population sizes of renters and owners, by adjusting them to number per 1,000 total households in Utah, reveals that owner-occupied households have decreased by 0.50 percent annually, while renter-occupied households have increased by 1.23 percent annually.

Figure 12: Total Housing Units vs. Total Occupied Housing Units in Utah, 2009-2017

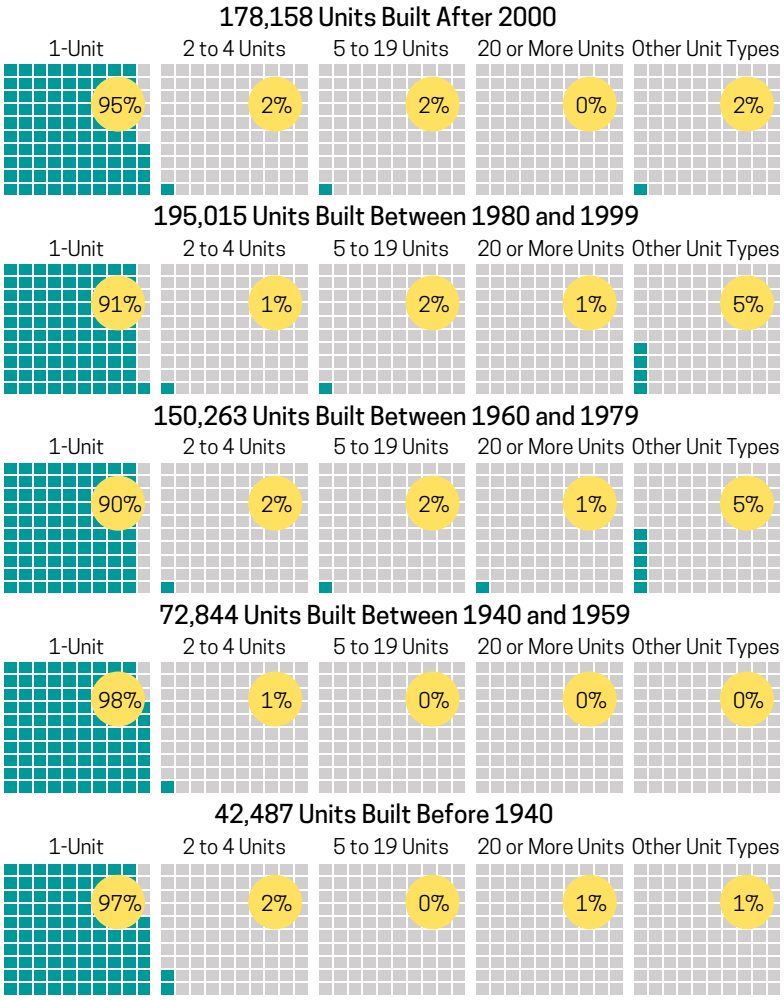


Source: USCB (2018) Table B25001 & S1101: American Community Survey, 2009 thru 2016 [Data]

VARIETY AND HOUSING OPTIONS

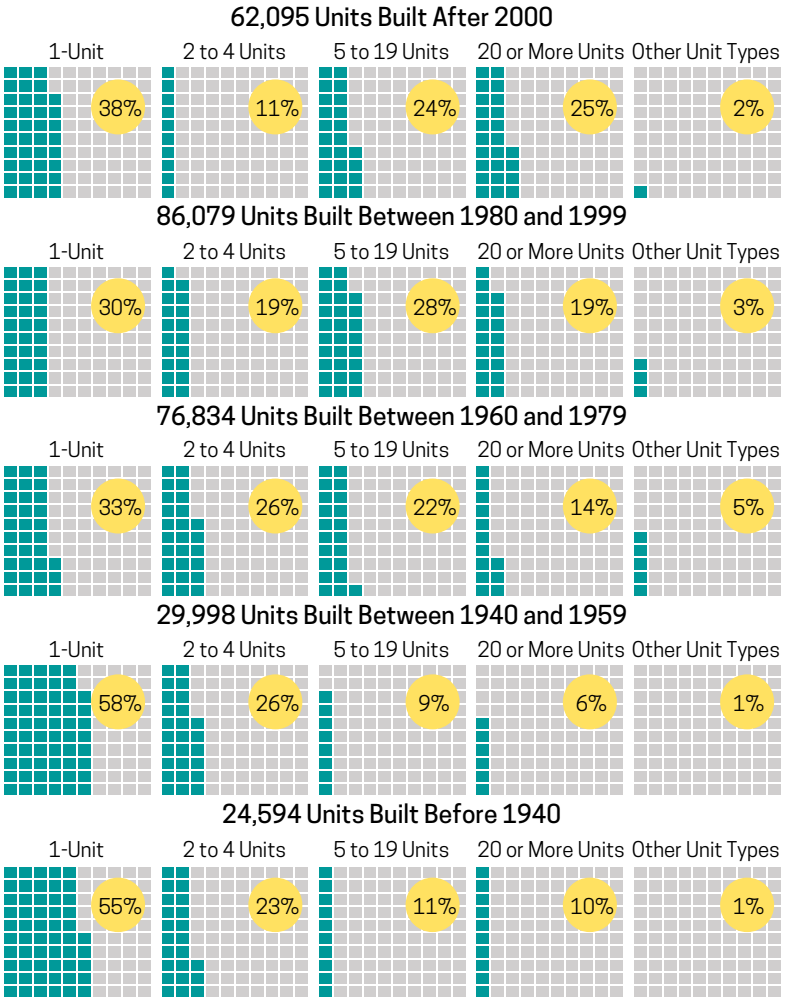
Having a variety of housing opportunities makes a community dynamic, lively, and, most importantly, sustainable. Like a diversified stock portfolio, a mix of housing opportunities that accommodates a demographically diverse population helps to create a sustainable community with income and age diversity. A variety of housing options is not only more sustainable, but it improves the overall affordability of housing. As units age, they generally become more affordable for families with modest incomes, and newer units tend to have amenities that entice households with a higher-income to move out of older units. This process is called "filtering."

Figure 13: Owner-occupied Units by Year Built and Type (638,767)



Source: USCB (2017) Table B25127: 2012-2016 American Community Survey, [Data]

Figure 14: Renter-occupied Units by Year Built and Type (279,600)



Source: USCB (2017) Table B25127: 2012-2016 American Community Survey, [Data]

Households facing housing fit issues perceive Utah's affordability gap differently than households facing an imbalanced distribution of housing cost to income. Another important inference drawn from this section and the earlier section on Utah's economic growth is that the "fit" between jobs and housing appears to be as important as the "balance" between housing costs and income in the aggregate. In other words, the distribution of home prices and rent may be commensurate with the distribution of wages in a region, but if the type of housing available is not well matched in terms of quality and character to the types of employment in the area, then there will still be perceived imbalance.

An imbalance in the distribution of housing costs to income and housing type to jobs fit may result in the need for some workers to commute long distances, or affordable housing units being mismatched with households in the wrong income bracket.

Age and Type of Structure

Figures 13 and **Figure 14** provide a summary of owner-occupied and renter-occupied housing units by the age of the structure and type. The type of structure essentially means the number of units in the building. The majority of "one-unit" structures are called single-family, detached housing.

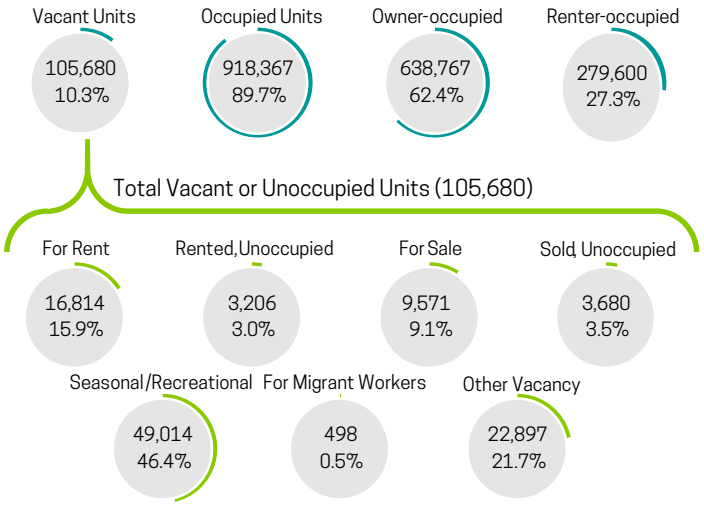
OCCUPANCY AND VACANCY

Upon examining **Figure 12**, it is intriguing to discover that Utah has managed to maintain an average vacancy rate of 10.1 percent each year despite the rising demand and public concern about the availability of affordable housing. Vacancy rates for owner-occupied and renter-occupied units and the geographic dispersion of housing help explain the seeming paradox between rising housing production in the state and regional shortages of affordable housing. The bad news is that many vacant housing units are simply not available to rent or own.

As shown in **Figure 15**, there were an estimated 1,024,047 housing units in Utah in 2016, but only 918,367 were occupied by renters and owners. This means that 105,680 housing units were vacant. Looking at **Figure 15**, one also sees that a total of 33,271 vacant units were on the market either for rent/rented or for sale/sold in 2016. However, the largest share of unoccupied, vacant housing units, 49,014 (46.4 percent), was for seasonal, recreational or occasional use second homes. The second largest share of units, 22,897 (21.7 percent), was categorized as other vacant housing, which includes, among others, dilapidated and uninhabitable units. Together, seasonal, recreational, or occasional use housing, migrant housing, and other vacant housing, accounted for 68.5 percent of Utah's vacant housing units. Assuming that 46.4 percent of all new construction will be used for seasonal recreation or occasional use, this means that a significant share of Utah's housing resources that could be used to close Utah's housing gap are being diverted.

Geographic mismatches over time also help to explain how Utah can have a housing gap and vacant units at the same time. Extremes in either end of the vacancy spectrum are not good, but for very different reasons. Although a very low vacancy rate is an indication of housing scarcity, a high vacancy rate is problematic too because it may indicate regional economic distress. While Utah's overall vacancy rate has risen from 9.79 percent in 2010 to 10.32 percent in 2016, many of the State's 29 counties face significantly higher vacancy rates.

Figure 15: Vacancy and Occupancy of Housing Units in Utah Total Housing Units (1,024,047)



Source: USCB (2017) American Community Survey, 2012-2016 [Data]

Table 6 lists where vacancy rates are waxing and waning from the lowest to highest vacancy rate. Unsurprisingly, counties concentrated in metropolitan areas, such as the Wasatch Front, have vacancy rates below the state's overall vacancy rate, whereas non-metropolitan counties, i.e. rural areas, are much more likely to have a higher than average vacancy rate. Vacancy rates can also be used to identify cities that might be facing a housing shortage or economic distress as well.

The five cities with the lowest vacancy rates in 2016 were:

1. Saratoga Springs city, 1.0 percent (55 vacant units)
2. Woods Cross, 1.3 percent (46 vacant units)
3. Providence, 1.4 percent (30 vacant units)
4. Kaysville, 1.5 percent (127 vacant units)
5. Heber City, 1.6 percent (69 vacant units)

The five cities with the highest vacancy rates in 2016 were:

1. Park City, 64.6 percent (6,217 vacant units)
2. Escalante, 40.4 percent (188 vacant units)
3. Midway, 29.8 percent (619 vacant units
4. Panguitch, 29.0 percent (235 vacant units)
5. East Carbon, 28.8 percent (242 vacant units)

Table 6: County Vacancy Rates in Utah for 2010 and 2016

	2010			2016		
Counties	Total Units	Vacant Units	Vacancy Rate	Total Units	Vacant Units	Vacancy Rate
Davis	94,974	4,367	4.60%	103,370	3,875	3.75%
Utah	142,770	7,150	5.01%	158,690	7,348	4.63%
Salt Lake	357,013	21,938	6.14%	376,956	20,895	5.54%
Tooele	18,822	1,104	5.87%	20,425	1,359	6.65%
Morgan	2,898	184	6.35%	3,294	215	6.53%
Cache	36,028	2,208	6.13%	39,192	3,099	7.91%
Box Elder	16,890	1,278	7.57%	18,097	1,442	7.97%
Weber	84,196	6,540	7.77%	88,016	7,857	8.93%
Juab	3,435	390	11.35%	3,573	418	11.70%
Uintah	11,178	704	6.30%	13,045	2,323	17.81%
Sevier	8,222	1,285	15.63%	8,525	1,404	16.47%
Millard	4,898	852	17.39%	4,933	770	15.61%
Carbon	9,442	1,476	15.63%	9,605	1,861	19.38%
Emery	4,431	652	14.71%	4,500	986	21.91%
Washington	55,877	9,982	17.86%	62,393	12,137	19.45%
Iron	18,845	3,690	19.58%	20,111	4,901	24.37%
Sanpete	9,984	2,114	21.17%	10,514	2,432	23.13%
Grand	4,723	1,004	21.26%	5,063	1,243	24.55%
Beaver	2,871	780	27.17%	2,942	681	23.15%
Wasatch	9,983	2,829	28.34%	11,710	3,017	25.76%
San Juan	5,696	1,365	23.96%	5,828	1,878	32.22%
Duchesne	8,812	2,291	26.00%	9,794	3,221	32.89%
Wayne	1,415	516	36.47%	1,618	640	39.56%
Piute	852	313	36.74%	935	390	41.71%
Summit	25,021	11,421	45.65%	27,183	12,641	46.50%
Garfield	3,556	1,420	39.93%	3,804	2,150	56.52%
Kane	5,431	2,366	43.56%	5,867	3,275	55.82%
Daggett	1,153	801	69.47%	1,170	953	81.45%
Rich	2,954	2,192	74.20%	2,894	2,269	78.40%
State of Utah	952,370	93,212	9.79%	1,024,047	105,680	10.32%

Source: BLS (2018) Quartely Census of Employment and Wages, 2009 thru 2017 [Data]. Note 1: Hachman Index scale: 0 = Homogeneous, 1 = Heterogeneous. Note 2: Red indicates a negative slope or a declining diversity trend from 2009 to 2016. Note 3: Green indicates the top 3 diverse economies, Yellow indicates the bottom 3.

4. ANALYSIS OF UTAH'S HOUSING AFFORDABILITY

DEFINING HOUSING AFFORDABILITY

KEY POINTS:

- A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms, or a single room that is occupied, or, if vacant, is intended for occupancy as separate living quarters.
- Affordable housing is any housing unit whose gross monthly costs, including utilities, are equal to no more than 30 percent of a household's gross monthly income.
- Cost-burdened households are households that spend more than 30 percent of their monthly income on housing costs.
- Severely cost-burdened households are households that spend more than 50 percent of their monthly income on housing costs.
- High housing costs reduce disposable income, which means that families with modest incomes have less money to pay bills, buy groceries and purchase other necessities.
- Real income growth is not keeping pace with rising rent prices.

Housing affordability is a crucial concept in assessing affordable housing for moderate-income households and vulnerable populations. To better understand the concept, it needs to be broken into its component parts: 'housing' and 'affordability.' The U.S. Census Bureau defines housing in terms of units, **"A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms, or a single room that is occupied, or, if vacant, is intended for occupancy as separate living quarters."**[7] Affordability is a ratio of a household's housing costs compared to its income. **The U.S. Federal Government defines affordable housing as any housing unit whose gross monthly costs, including utilities, are equal to no more than 30 percent of a household's gross monthly income.**[8] In general, a housing unit is considered affordable regardless of the payment amount, the type of unit, the age of the unit, the size of the unit, or the location of the unit, if the unit's gross costs are under 30 percent of the occupying household's gross monthly income. This means that a newly built five-bedroom house in the suburbs with a $3,000 per month mortgage payment and utilities is affordable for a family household earning $10,000 per month. And likewise, a studio apartment built in 1960 with a gross rent of $300 per month with utilities is affordable for a household earning only $1,000 per month.

HOUSING COST BURDEN

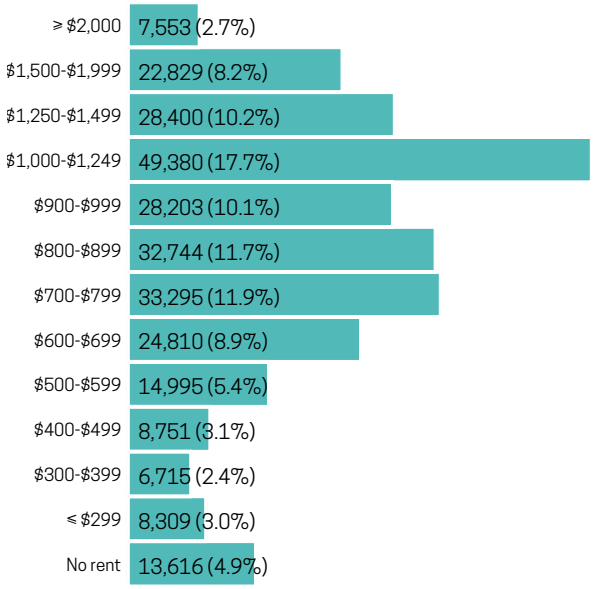
Related to the concept of housing affordability are the concepts of cost burden and severe cost burden. The U.S. Department of Housing and Urban Development defines ***cost-burdened households*** as households that spend between 30 and 50 percent of their gross monthly income on housing costs, such as rent or mortgage payments.[9] ***Severely cost-burdened households*** spend more than 50 percent of their gross monthly income on housing costs.[10] **According to the 2017 Consumer Expenditure Survey, the typical renter household in the western U.S. would be considered cost-burdened because they spend 34.9 percent of their Monthly Gross Income on Gross Rent.**[11]

According the 2012-2016 American Community Survey, monthly housing costs for owner households with a mortgage diverged significantly from renter households throughout the U.S. Nationwide, selected monthly housing costs for owner households with a mortgage ($1,491 per month) were approximately 1.57 times as much as the gross monthly rent of renter households ($949 per month). Similarly, in Utah the median owner household with a mortgage paid $1,429 per month in selected monthly housing costs, or 1.57 times as much as the state's median gross rent of $912 per month (see **Figure 16** and **Figure 17**).

There is also a significant disparity in income between owner households and renter households throughout the country. Likewise, data from the U.S. Census Bureau indicates that Utah follows the national trend. Nationwide, the median owner household ($70,586 per year) earned nearly twice as much as the median renter household ($35,192 per year). In Utah, the median owner household earned $75,170 per year while the median renter household earned $38,196 per year, according the 2012-2016 ACS (see **Figure 18** and **Figure 19**).

Figure 16: Distribution of Rental Costs for 279,600 Rental Units in Utah

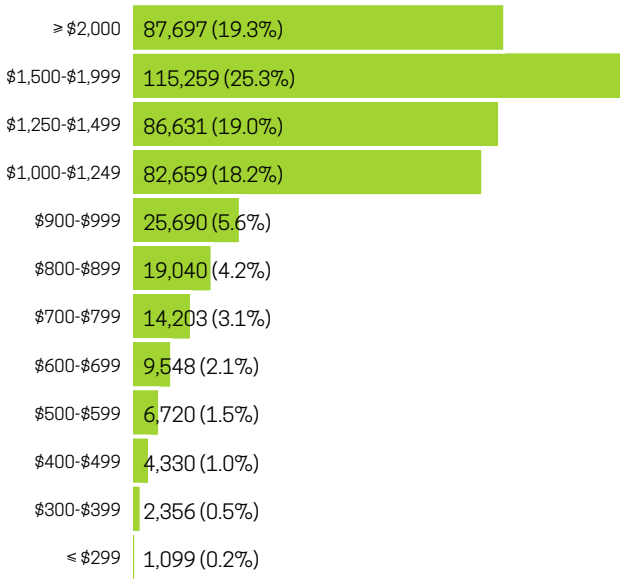
(Median Gross Rent: $912)



Source: USCB (2017) Table B25063: American Community Survey, 2012-2016 [Data]

Figure 17: Distribution of Ownership Costs for 455,232 Mortgaged Units In Utah

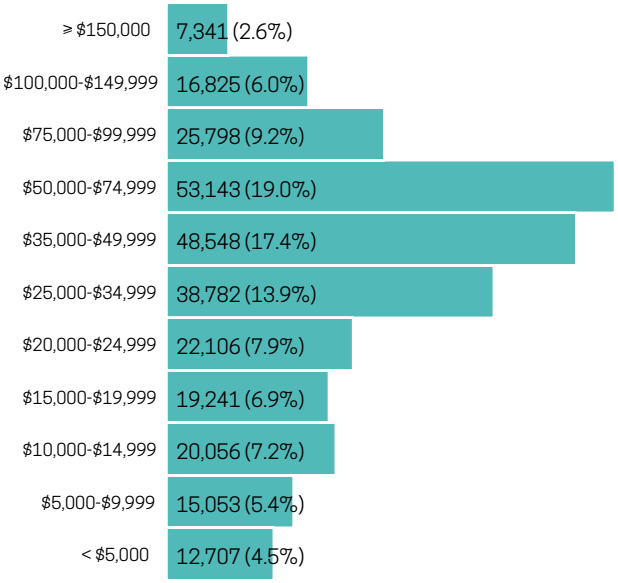
(Median Select Costs: $1,429)



Source: USCB (2017) Table B25087: American Community Survey, 2012-2016 [Data]

Figure 18: Distribution of Income for 279,600 Renter Households in Utah

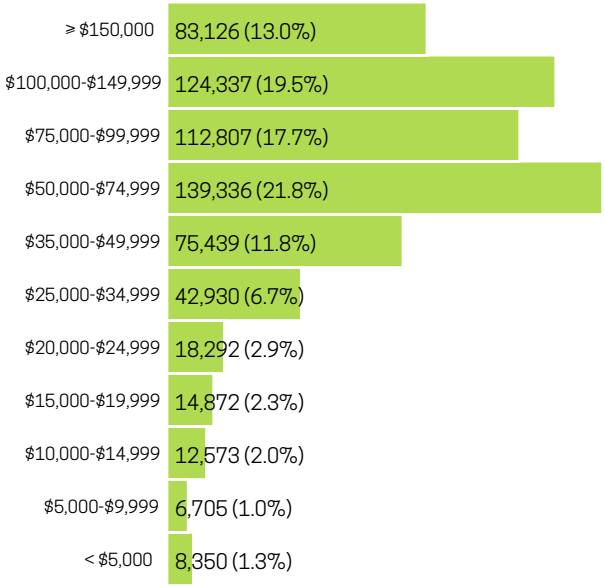
(Median Income: $38,196)



Source: : USCB (2017) Table B25118: American Community Survey, 2012-2016 [Data]

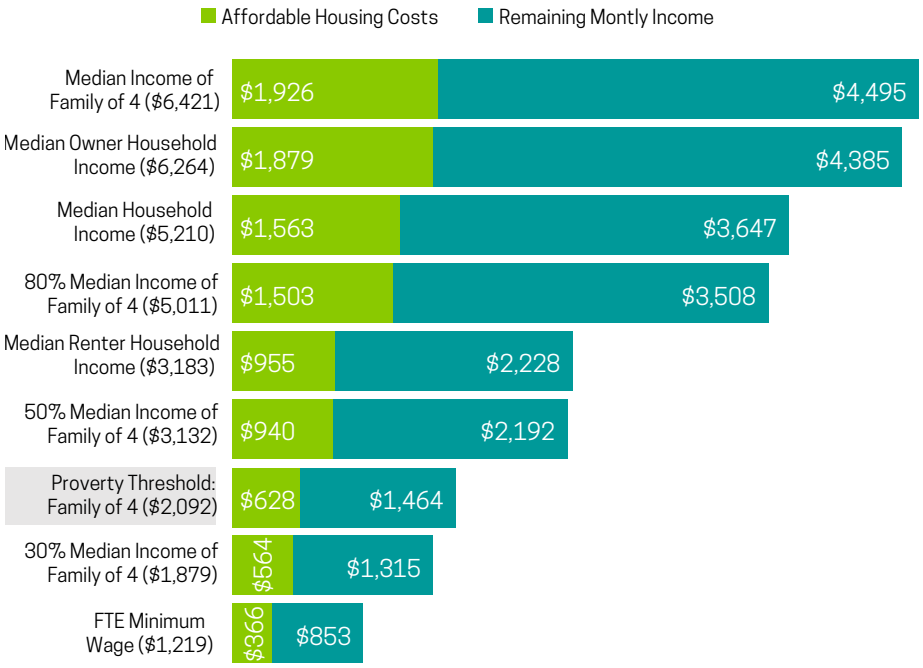
Figure 19: Distribution of Income for 638,767 Owner Households in Utah

(Median Income: $75,170)



Source: : USCB (2017) Table B25118: American Community Survey, 2012-2016 [Data]

Figure 20: Affordable Housing Costs and Remaining Income by Expected Income in Utah, 2016



Source: USCB (2017) 2012-2016 American Community Survey 5-yr Estimates [Data].

Gross housing costs are more affordable for homeowners than for renter households at the medians of each group. Nationally, the typical owner household with a mortgage in the U.S. pays 25.3 percent of their gross monthly income on housing costs, and the typical renter household is cost-burdened by paying 32.4 percent of their income on gross rent. Unsurprisingly, Utah's median monthly ownership costs are also more affordable to the median homeowner with a mortgage than the state's median gross rent is for the median renter household. Based on the ratio of median housing costs to median income, in Utah the median householder with a mortgage can expect to pay 22.8 percent of their gross income on selected ownership costs whereas the median renter can expect to pay 28.7 percent of their gross income on gross rent.

Figure 20 illustrates residual income from a set of standard income thresholds used by various government housing programs. Based on these standard income thresholds, it estimates how much of a household's income would remain after it has paid an affordable rent equal to 30 percent of its monthly gross income.

In Utah, the median family household earned an unadjusted $6,421 per month in 2016. After rent, the median family household in Utah was expected to have $4,495 left over each month. But, Utah's median family would become cost-burdened if it spent more than $1,926 on gross housing expenses each month, and it would be severely cost-burdened if it spent $3,211 or more. Being cost-burdened by a high monthly rent payment means that a family would have less money to pay bills, buy groceries

and purchase other common necessities. The median renter household in Utah earned $3,183 per month, which is a little less than half the income of Utah's median family and slightly more than a family of four with an income at 50 percent MFI ($3,132 per month). That means that both the median renter and a family of four at 50 percent MFI could afford to pay Utah's median gross rent of $912 per month.

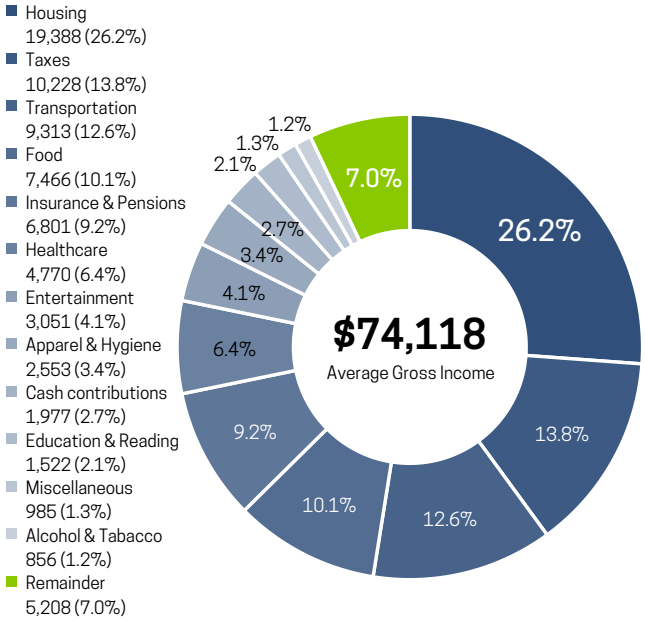
IS THE COST OF HOUSING REALLY TOO HIGH?

Income constrains a household's choice of housing and limits its consumption of other goods and services. The Bureau of Labor Statistics' annual Consumer Expenditure Survey confirmed that housing was the single largest expense for the average American household. As seen in **Figure 21**, the average household in the U.S. spent $19,388 (26.2 percent) of their gross income on housing. It was nearly double the $9,313 (12.6 percent) that the typical American household spent on transportation. The differences in a household's ability to afford non-shelter needs becomes more readily apparent when one compares the expected expenditures of the typical renter household in the western U.S. to a homeowner household in the same region.

Figure 21 and **Figure 23** help illustrate the differing residual income effects of housing costs of homeowners with renters. Whereas homeowners in the western U.S. saw a net residual savings of $9,588 (a decline from $13,180 last year) at the end of the year, after accounting for all other expenditures, renter households were indebted by -$1,024 (an increase from $846 last year). Over time, the average homeowner will accrue significant savings while renters tend to increase their debt burden.

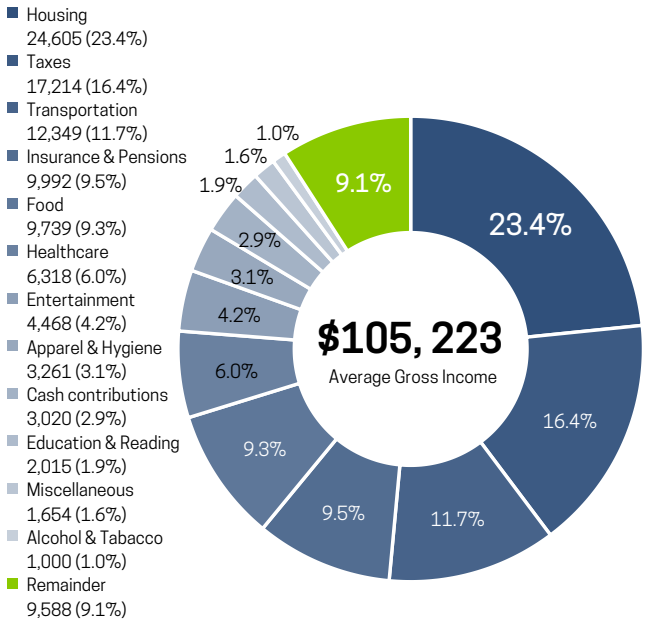
The cost of transportation deserves a mention because of its relationship with housing choice and neighborhood choice. Although households choose home and work locations for myriad reasons, low-income workers are particularly sensitive to the impacts of housing prices and commuting distances. People tend to substitute lower transportation costs for higher housing costs. In general, housing becomes more affordable the further it is from the centers of business in an area. Households are expected to rent or purchase housing at an optimal location that balances housing costs and transportation costs. With less disposable income, the opportunity to save money on transportation costs by living in affordable housing that is closer to one's workplace provides significant benefits for low-income workers trying to make ends meet. Unfortunately, the actual housing that low-income workers can afford often requires a substantial commute.

Figure 21: Distribution of Average Household Expenditures in the United States, 2016-2017



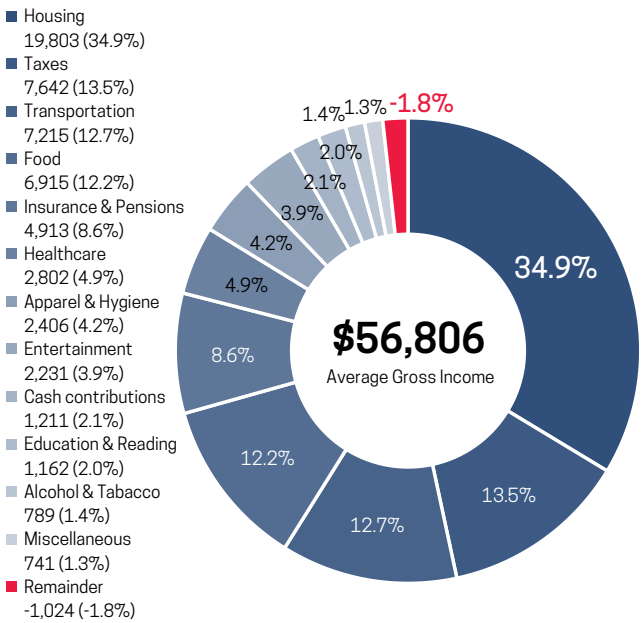
Source: BLS (2018) Consumer Expenditure Survey: Table 3330, 2016-2017

Figure 22: Distribution of Average Owner Household Expenditures in the Western U.S., 2016-2017



Source: BLS (2018) Consumer Expenditure Survey: Table 3330, 2016-2017

Figure 23: Distribution of Average Renter Household Expenditures in the Western U.S., 2016-2017



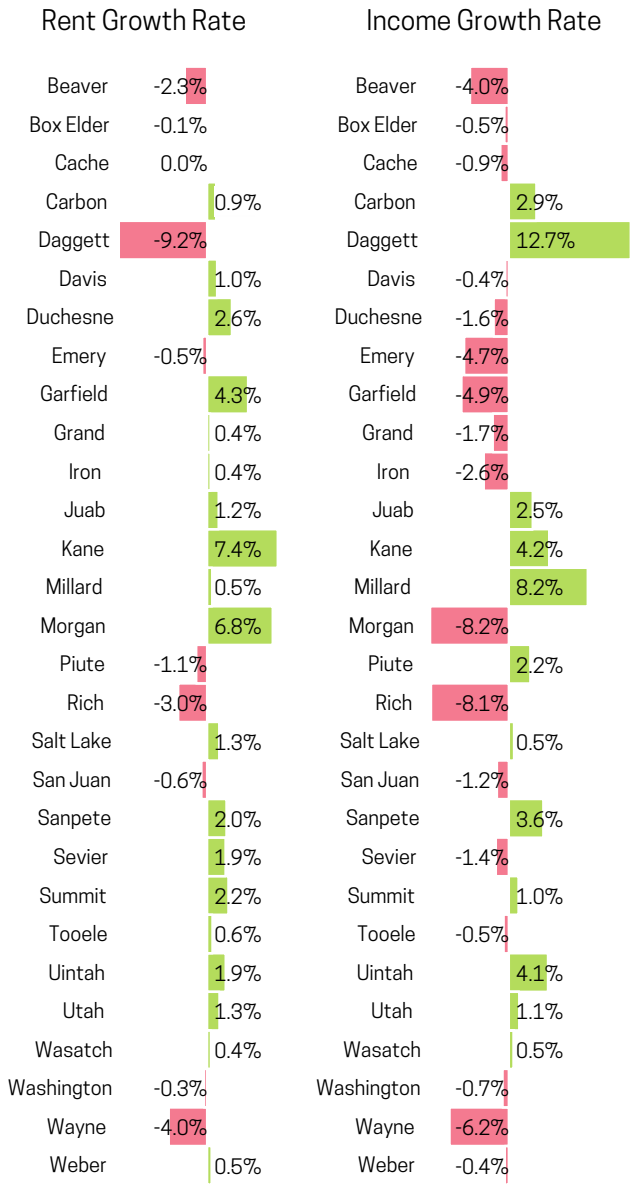
Source: BLS (2018) Consumer Expenditure Survey: Table 3330, 2016-2017

Real Income Growth and Rent Creep

Undeniably, Utah has benefited from a resilient economy over the last decade, but what is alarming is the widening rift between what the typical household can afford to pay for housing and the average cost of housing. Real income growth simply has not kept pace with the rising cost of housing in the State over the last decade. Slow wage growth has led many Utahns to postpone or forego homeownership, which only intensifies the competition for affordable rental units.

Although rent tends to cost less per month than mortgages, it does not mean that renting is more affordable for households with modest incomes. Rent inflation exacerbates housing cost burdens over time. Rent inflation occurs when rental housing costs increase at a faster rate than real income growth. In terms of 2017 constant dollars, the median rent in Utah increased by 1.03 percent per year between 2009 and 2016. However, the purchasing power of the median income of Utah's renter households decreased by 0.31 percent per year between 2009 and 2016, also in 2017 constant dollars. **Figure 24** shows the average rate of income and rent creep adjusted to 2017 dollars for each county. Of particular concern are counties where constant rent is rising and constant income is declining such as in: Davis, Duchesne, Garfield, Grand, Iron, Morgan, Sevier, Tooele and Weber.

Figure 24: Constant Median Rent & Income Growth Rates, 2009-2016



Source: USCB: American Community Survey, 2009 thru 2016 [Tables B25064 & B25119].
*2017 Constant Dollars.

IS THE AMERICAN DREAM "OUT OF REACH?"

Fair Market Rents (FMR) are standards for housing subsidy payments of the Housing Choice Voucher program and for some expiring project-based Section 8 contracts. They also serve as rent ceilings in the HOME investment partnership program. [12] **Table 7** lists the Fair Market Rent of housing unit, in each of Utah's counties by number of bedrooms. On an annual basis, HUD determines equitable rent payment standards for its housing choice voucher program and Section 8 contracts using a simple formula applied to a local market. Two-bedroom units are the most common size for rental units, which is why this report uses two-bedroom units as a baseline when considering affordable rental housing, as seen in **Table 9**.

Housing costs priced at Fair Market Rent could provide some relief for moderate-income households, but that may not be enough for very low-income and extremely low-income households. As **Table 8** shows, FMRs provide the most relief to low-income households at 80 percent of HAMFI for housing unit with zero to four bedrooms. At most, a four-person low-income household would only pay 26.4 percent of its income per month on a four-bedroom home. A four-person very low-income household earning 50 percent of HAMFI could afford a two-bedroom unit but would expect to be cost burdened if it needed to rent a three- or four-bedroom unit.

Table 7: FY2019 Fair Market Rents by County in Utah

Counties	0-BR	1-BR	2-BR	3-BR	4-BR
Beaver	$476	$545	$699	$945	$1,155
Box Elder	$473	$544	$720	$1,004	$1,172
Cache	$450	$564	$700	$1,008	$1,213
Carbon	$500	$549	$699	$1,011	$1,211
Daggett	$528	$605	$776	$1,070	$1,218
Davis	$594	$713	$910	$1,290	$1,514
Duchesne	$555	$684	$816	$1,142	$1,363
Emery	$476	$611	$699	$887	$945
Garfield	$476	$545	$699	$1,011	$1,019
Grand	$562	$644	$826	$1,112	$1,117
Iron	$475	$598	$699	$1,011	$1,179
Juab	$654	$751	$862	$1,246	$1,514
Kane	$535	$619	$809	$1,070	$1,218
Millard	$476	$528	$699	$889	$1,228
Morgan	$594	$713	$910	$1,290	$1,514
Piute	$521	$597	$765	$958	$1,201
Rich	$528	$605	$776	$1,070	$1,218
Salt Lake	$708	$870	$1,075	$1,518	$1,727
San Juan	$476	$611	$699	$930	$1,097
Sanpete	$476	$528	$699	$876	$987
Sevier	$476	$584	$699	$969	$1,099
Summit	$760	$977	$1,183	$1,570	$2,078
Tooele	$613	$751	$887	$1,282	$1,558
Uintah	$588	$692	$916	$1,209	$1,402
Utah	$654	$751	$862	$1,246	$1,514
Wasatch	$703	$781	$1,033	$1,347	$1,788
Washington	$649	$717	$916	$1,312	$1,609
Wayne	$476	$611	$699	$876	$1,097
Weber	$594	$713	$910	$1,290	$1,514

Source: HUD (2018) FY2019 Fair Market Rents [Data]

Table 8: Expected Cost Burdens of Fair Markets Rent as a Portion of Monthly Income Limits in Utah

FMR/Income Limit		FMR 0-BR	FMR 1-BR	FMR 2-BR	FMR 3-BR	FMR 4-BR
		$553	$655	$815	$1,119	$1,327
80% HAMFI	$5,033	11.0%	13.0%	16.2%	22.2%	26.4%
50% HAMFI	$3,150	17.6%	20.8%	25.9%	35.5%	42.1%
30% HAMFI	$1,892	29.2%	34.6%	43.1%	59.2%	70.1%

Source: HUD: 2018 Income Limits and 2019 Fair Market Rents [Data Files]

However, FMR will be a particular challenge for a four-person extremely low-income household in 2019. Based on the state's HAMFI, an extremely low-income household at the top of its income limit range should expect to pay 43.1 percent of its gross monthly income on rent for the typical two-bedroom unit at FMR. It would be severely cost-burdened, spending nearly 69.2 percent of its income, if it needed to rent a three-bedroom unit at FMR. Only a zero-bedroom efficiency unit, (studio apartment), is affordable for an ELI household at 29.2 percent of its income.

The affordability ratio of median rent to median income are not geographically distributed evenly throughout Utah. **Table 9** compares the median gross rent and the FMR of a 2-bedroom rental unit in each of Utah's counties. A median renter household would pay more than 30 percent of its income for a rental unit in Grand, Iron, Morgan and Washington Counties at their respective median gross rents. The median renter household in six counties would pay more than 30 percent of its income for a two-bedroom unit at FMR in their respective county in FY 2019: Emery, Grand, Iron, Piute, Salt Lake and Weber Counties.

Table 9: Affordability of the Median Gross Rent and 2-Bedroom Fair Market Rent of Each of Utah's Counties Relative to the Median Income of Renters

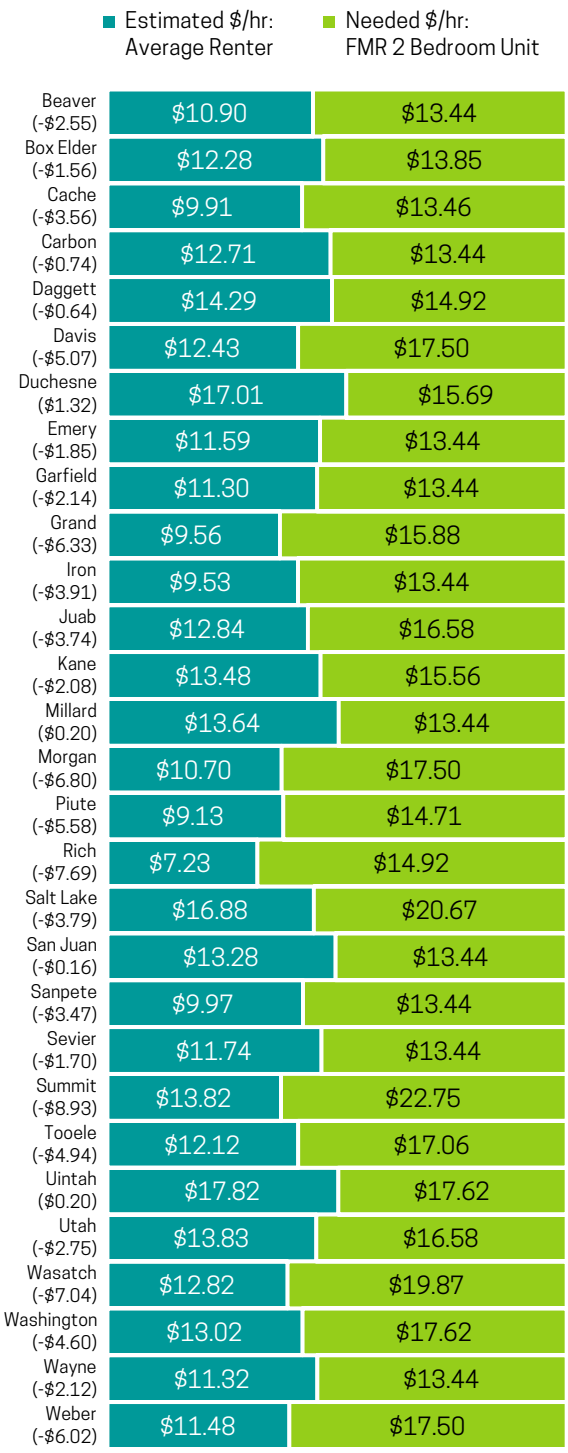
Counties	Median Income	Affordable Rent	Median Rent		2-BR FMR	
			Cost	Shortfall	Cost	Shortfall
Beaver	$30,101	$753	$625	$128	$699	$54
Box Elder	$35,227	$881	$685	$196	$720	$161
Cache	$28,498	$712	$708	$4	$700	$12
Carbon	$29,091	$727	$635	$92	$699	$28
Daggett	$80,625	$2,016	$338	$1,678	$776	$1,240
Davis	$42,691	$1,067	$943	$124	$910	$157
Duchesne	$41,314	$1,033	$853	$180	$816	$217
Emery	$24,375	$609	$587	$22	$699	-$90
Garfield	$35,865	$897	$756	$141	$699	$198
Grand	$26,731	$668	$729	-$61	$826	-$158
Iron	$26,431	$661	$705	-$44	$699	-$38
Juab	$38,438	$961	$773	$188	$862	$99
Kane	$42,642	$1,066	$911	$155	$809	$257
Millard	$35,212	$880	$622	$258	$699	$181
Morgan	$40,981	$1,025	$1,043	-$18	$910	$115
Piute	$26,563	$664	$555	$109	$765	-$101
Rich	$31,058	$776	$608	$168	$776	$0
Salt Lake	$40,151	$1,004	$970	$34	$1,075	-$71
San Juan	$30,667	$767	$620	$147	$699	$68
Sanpete	$31,127	$778	$685	$93	$699	$79
Sevier	$31,532	$788	$718	$70	$699	$89
Summit	$55,431	$1,386	$1,262	$124	$1,183	$203
Tooele	$39,967	$999	$847	$152	$887	$112
Uintah	$51,368	$1,284	$978	$306	$916	$368
Utah	$38,558	$964	$919	$45	$862	$102
Wasatch	$47,472	$1,187	$1,152	$35	$1,033	$154
Washington	$38,452	$961	$964	-$3	$916	$45
Wayne	$32,727	$818	$548	$270	$699	$119
Weber	$33,280	$832	$795	$37	$910	-$78

Source 1: USCB (2017) Table B25119: 2012-2016 American Community Survey [Data]
Source 2: USCB (2017) Table B25064: 2012-2016 American Community Survey [Data]
Source 3: HUD (2018) FY2019 County Level Fair Market Rents [Data]

This report also utilized the National Low Income Housing Coalition's *"Out of Reach"* methodology to conduct a housing affordability analysis of HUD's Fair Market Rents.[13] Based on the FMRs that HUD published for 2019,[14] and weighted for each county's renter population, the average FMR for a two-bedroom apartment in Utah is anticipated to be $952 per month, which is an increase of $32 over last year's average FMR. At 30 percent of a household's gross income, a renter household will need to earn at least $38,094 annually, $3,174 per month or $18.31 per hour to afford the average 2-bedroom rental unit at FMR, assuming full-time employment (see Appendix B).

Hourly wage shortfalls will again present a significant challenge for many of Utah's renter households in 2019. Using the National Low Income Housing Coalition's methodology, the average renter in Utah earns $14.63 per hour and would need an additional $3.68 more per hour, working full-time, to afford a two-bedroom apartment at FMR.[15],[16] As shown in **Figure 25**, the average renter earns less than the necessary wage to afford a two-bedroom apartment at FMR in 26 out of 29 counties. Unfortunately, the average renter can only afford the two-bedroom FMR in Duchesne, Millard and Uintah counties with a surplus of $1.32 per hour, $0.20 per hour, and $0.20 per hour respectively. On the opposite end of the spectrum, renters in Wasatch County would need to earn an additional $7.04 per hour, renters in Rich County would need to earn an additional $7.69 per hour, and finally, renters in Summit County would need to earn $8.93 per hour more to afford FMR. As is also indicated in last year's assessment, nowhere in Utah will a full-time worker earning minimum wage be able to afford a two-bedroom apartment FMR in any of Utah's counties in 2019. It would take a single worker a total of 131 hours of work, or 3.3 weeks of full-time work, at $7.25/hr., just to pay the average FMR in Utah.

Figure 25: Renter Income vs. Income Required to Afford HUD's 2019 Fair Market Rent by County in Utah



Source1: HUD (2018) 2019 Fair Market Rents [FMR19_INFO].
Source 2: USCB (2017) 2012-2016 American Commu nity Survey [Tables: B19113, B25003, & B25119].
Source 3: BLS (2018, Sept.) Quarterly Census of Earnings and Wages [County High-Level].

WORKFORCE HOUSING NEEDS

KEY POINTS:

- Workforce housing is any housing unit that a household earning 60 to 120 percent of the median family income can afford to rent.
- Wages in industries that employ many Utahns are too low to afford the state's median gross rent.

In 2008, the Utah League of Cities and Towns defined workforce housing as "…housing units—for sale or rent—that are affordable to households earning 60 percent of AMI or more."[17] Workforce housing is housing whose gross monthly costs target working class households earning between 60 and 120 percent of HAMFI and have at least one member of the household participating in the local labor force.[18,19,20,21] Workforce housing enables people who are gainfully employed in low-income service occupations to live and work in the same community.[22,23] Local governments in areas of high income disparity often subsidize workforce housing directly to attract and retain essential occupations, such as teachers, police officers, firefighters and other local-level civil servants.[24,25,26] **Table 10** provides a sample of occupations and the national median income of those occupations. It also calculates an affordable housing cost threshold for each occupation, based on 30 percent of its national median income. **Table 10** then compares the affordable housing cost threshold of each occupation to Utah's median gross rent, and to average FY 2019 FMRs by rental housing unit bedrooms. Rents marked in red in **Table 10**, or listed with a negative number, are not affordable for single-income households in that class of occupations.

Between 2009 and 2016 Utah had, on average, 123,544 people working in the educational services industry, with an average unadjusted wage of $35,404 per year. The educational services industry is also the third largest employer in the state. As a barometer of housing costs to income, **Table 10** and **Table 11** show that people in the educational services industry in Utah make substantially less than the national median income of certain teaching occupations. In 2016, the median gross monthly rent in Utah was $912 per month, which represents 30.9 percent of the gross monthly income of the typical person employed in the educational services industry, and HUD would categorize them as being cost burdened.

Table 10: Affordability of 2019 Fair Market Rents in Utah Relative to the National Median Income of Common Workforce Occupations

Occupations	Median Monthly Income	Affordable Housing Burden	Median Rent ($912/ mo.)	0-BR FMR ($553/ mo.)	1-BR FMR ($655/ mo.)	2-BR FMR ($815/ mo.)	3-BR FMR ($1,119/ mo.)	4-BR FMR ($1,327/ mo.)
Fast Food Workers	$1,661	$498	-$414	-$55	-$157	-$317	-$621	-$829
Waiters & Waitresses	$1,796	$539	-$373	-$14	-$116	-$276	-$580	-$788
Preschool & Kindergarten Teachers	$2,075	$622	-$290	$69	-$33	-$193	-$497	-$705
Refuse & Recyclable Material Collectors	$2,563	$769	-$143	$216	$114	-$46	-$350	-$558
Construction Laborers	$2,649	$795	-$117	$242	$140	-$20	-$324	-$532
Bus Drivers	$2,810	$843	-$69	$290	$188	$28	-$276	-$484
Court, Municipal, & License Clerks	$3,175	$952	$40	$399	$297	$137	-$167	-$375
Social Workers	$3,616	$1,085	$173	$532	$430	$270	-$34	-$242
Elementary & Middle School Teachers	$4,207	$1,262	$350	$709	$607	$447	$143	-$65
Librarians	$4,239	$1,272	$360	$719	$617	$457	$153	-$55
Secondary School Teachers	$4,360	$1,308	$396	$755	$653	$493	$189	-$19
Postal Service Mail Carriers	$4,782	$1,435	$523	$882	$780	$620	$316	$108
Police & Sheriff's Patrol Officers	$5,211	$1,563	$651	$1,010	$908	$748	$444	$236
Registered Nurses	$5,349	$1,605	$693	$1,052	$950	$790	$486	$278
Firefighters	$5,436	$1,631	$719	$1,078	$976	$816	$512	$304
Legislators	$5,737	$1,721	$809	$1,168	$1,066	$906	$602	$394
Urban & Regional Planners	$5,967	$1,790	$878	$1,237	$1,135	$975	$671	$463
Budget Analysts	$6,049	$1,815	$903	$1,262	$1,160	$1,000	$696	$488

Source 1: USCB (2017) Table B24121: 2012-2016 American Community Survey [Data]
Source 2: USCB (2017) Table B25064: 2012-2016 American Community Survey [Data]
Source 3: HUD (2018) FY2019 County Level Fair Market Rents [Data]

Table 11 provides a summary of the affordability of the state's median gross rent and the U.S. Department of Housing and Urban Development's fair market rents (FMR) per bedroom by the average wage of each category of the North American Industry Classification System. Most notably, the typical employee in Accommodation and Food Services (104,630 employees), cannot afford to rent a studio apartment in Utah. To workers in this industry, an FMR of $553 represents 36.2 percent of their gross monthly earnings, and HUD would classify them as being cost burdened by rent. Although a gap of $95 per month may not seem like much for people above the median income threshold, it represents 6.2 percent of their before-tax monthly income. The most common apartment in Utah is a two-bedroom unit, with an FMR of $815 per month. HUD would classify a worker in the Accommodation & Food Services industry as severely cost burdened if they spent 53.4 percent of their income on the FMR of a two-bedroom unit.

Table 11: Affordability of 2019 Fair Market Rents in Utah Relative to the Unadjusted Average Income of Each Industry Classification

Occupations	Median Monthly Income	Affordable Housing Burden	Median Rent ($912/mo.)	0-BR FMR ($553/mo.)	1-BR FMR ($655/mo.)	2-BR FMR ($815/mo.)	3-BR FMR ($1,119/mo.)	4-BR FMR ($1,327/mo.)
Accommodation & Food Services	$1,526	$458	-$454	-$95	-$197	-$357	-$661	-$869
Retail Trade	$2,050	$615	-$297	$62	-$40	-$200	-$504	-$712
Administrative & Waste Services	$2,350	$705	-$207	$152	$50	-$110	-$414	-$622
Agriculture	$2,421	$726	-$186	$173	$71	-$89	-$393	-$601
Other Services	$2,422	$727	-$185	$174	$72	-$88	-$392	-$600
Educational Services	$2,950	$885	-$27	$332	$230	$70	-$234	-$442
Arts, Entertainment, & Recreation	$3,005	$902	-$10	$349	$247	$87	-$217	-$425
Information	$3,285	$986	$74	$433	$331	$171	-$133	-$341
Real Estate	$3,407	$1,022	$110	$469	$367	$207	-$97	-$305
Construction	$3,718	$1,115	$203	$562	$460	$300	-$4	-$212
Transportation & Warehousing	$3,786	$1,136	$224	$583	$481	$321	$17	-$191
Health Care & Social Assistance	$4,055	$1,217	$305	$664	$562	$402	$98	-$110
Public Administration	$4,165	$1,249	$337	$696	$594	$434	$130	-$78
Manufacturing	$4,347	$1,304	$392	$751	$649	$489	$185	-$23
Unclassified	$4,735	$1,420	$508	$867	$765	$605	$301	$93
Wholesale Trade	$4,989	$1,497	$585	$944	$842	$682	$378	$170
Professional Services	$5,443	$1,633	$721	$1,080	$978	$818	$514	$306
Finance & Insurance	$6,211	$1,863	$951	$1,310	$1,208	$1,048	$744	$536
Mining, Oil, & Natural Gas	$6,280	$1,884	$972	$1,331	$1,229	$1,069	$765	$557
Management of Firms	$6,792	$2,038	$1,126	$1,485	$1,383	$1,223	$919	$711
Utilities	$6,851	$2,055	$1,143	$1,502	$1,400	$1,240	$936	$728

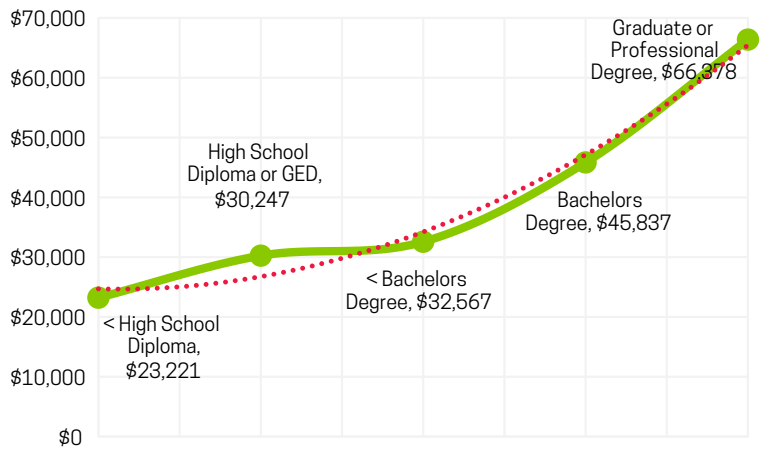
Source 1: BLS (2018) Quarterly Census of Employment and Wages [Data]
Source 2: USCB (2017) Table B25064: 2012-2016 American Community Survey [Data]
Source 3: HUD (2018) FY2019 County Level Fair Market Rents [Data]

Educational Attainment and Housing Affordability

KEY POINTS:

- Getting a college degree may make housing more affordable for some households.
- Increasing regional educational opportunities stimulates economic growth, which then promotes population growth and a higher demand for housing.
- Housing "fit" becomes increasingly more important than housing "balance" as the average educational attainment and household income rise in a region, which may lead to housing becoming less affordable for individuals without a college degree.

Figure 26: The Effect of Educational Attainment on Income



Source 1: USCB (2017) Table B20004: 2012-2016 American Community Survey [Data]

Educational attainment is an important economic factor in explaining Utah's demand for affordable housing since labor market outcomes are closely linked to educational attainment.[27] Educational attainment is highly predictive of future employment and wages at the individual level, and economic diversity in the aggregate. Educational attainment, or the lack thereof, can act as a catalyst or inhibitor because it magnifies or diminishes earnings regardless of industry.

One usually expects individuals with higher levels of educational attainment to earn more than someone with less education. Individuals and regions who are more highly educated are more likely to receive higher earnings and are less likely to be unemployed or live in poverty. **Figure 26** shows that in Utah, income usually curves upward with successive educational accomplishments.

Unemployment rates in Utah correlate with educational attainment. Those with higher educational attainment typically experience lower rates of unemployment. According to the 2012-2016 ACS, 6,009 (7.4 percent) out of 81,651 adults ages 25 to 64 without a high school diploma were unemployed. In contrast, only 5.9 percent of 238,877 high school graduates were unemployed. Those with a bachelor's degree or higher had the lowest rate of unemployment. Only 2.8 percent of 375,652 college educated individuals experienced unemployment. Urban unemployment rates also adhered closely to overall rates, while rural employment rates favored higher educational attainment even more.[28]

In general, a larger share of housing becomes more affordable with each successive educational attainment. Although higher education provides workers with significant economic advantages, the rising cost of housing in Utah undercuts those advantages. **Table 12** demonstrates that on average it takes a postsecondary degree to afford the state's median gross rent and the fair market rent of a two- or three-bedroom rental unit. It takes a graduate or professional degree to upgrade to a four-bedroom unit at fair market rent. Incidentally, **Table 13** indicates that renters are more likely to have lower educational attainments, which likely limits the housing that they can afford.

Table 12: Affordability of 2019 Fair Market Rents Relative to the Median Income of Educational Attainment in Utah

Occupations	National Median Income	Median Monthly Income	% of Utah's HAMFI	Affordable Housing Burden	Median Rent ($912/mo.)	0-BR FMR ($553/mo.)	1-BR FMR ($655/mo.)	2-BR FMR ($815/mo.)	3-BR FMR ($1,119/mo.)	4-BR FMR ($1,327/mo.)
< High School Diploma	$23,221	$1,935	30.8%	$581	-$331	$28	-$74	-$234	-$538	-$746
High School Diploma or GED	$30,247	$2,521	40.1%	$756	-$156	$203	$101	-$59	-$363	-$571
< Bachelors Degree	$32,567	$2,714	43.1%	$814	-$98	$261	$159	-$1	-$305	-$513
Bachelors Degree	$45,837	$3,820	60.7%	$1,146	$234	$593	$491	$331	$27	-$181
Graduate or Professional Degree	$66,378	$5,532	87.9%	$1,659	$747	$1,106	$1,004	$844	$540	$332

Source 1: USCB (2017) Table B20004: 2012-2016 American Community Survey [Data]
Source 2: USCB (2017) Table B25064: 2012-2016 American Community Survey [Data]
Source 3: HUD (2018) FY2019 County Level Fair Market Rents [Data]

Table 13: Tenure by Educational Attainment

	Owners		Renters		Total	
	n	%	n	%	n	%
< High School Diploma	33,207	3.6%	31,890	3.5%	65,097	7.1%
High School Diploma or GED	120,534	13.1%	64,181	7.0%	184,715	20.1%
< Bachelors Degree	239,013	26.0%	115,853	12.6%	354,866	38.6%
≥ Bachelor's Degree	246,013	26.8%	67,676	7.4%	313,689	34.2%
Total	638,767	69.6%	279,600	30.4%	918,367	100.0%

Source: USCB. (2017). Table B25013: 2012-2016 American Community Survey [Data]

5. HOUSING AFFORDABILITY MISMATCH ANALYSIS

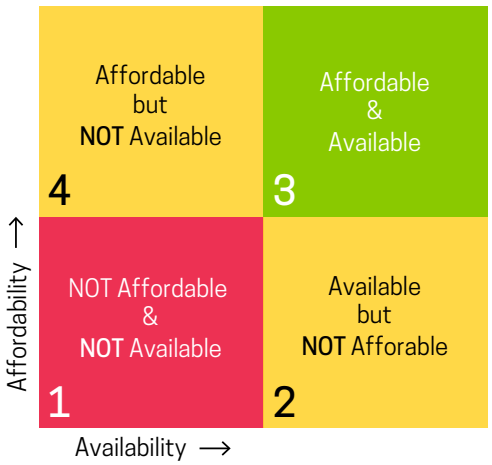
DEFINING AVAILABLE HOUSING

KEY POINTS:

- Affordable housing costs are equal to or less than 30 percent of a household's gross monthly income.
- A housing unit is available if that unit is both affordable and vacant, or is currently occupied by a household at or below the defined income threshold.

The problems of housing affordability are compounded with issues of housing availability. The National Low Income Housing Coalition explains that, "A housing unit is affordable and available if that unit is both affordable and vacant, or is currently occupied by a household at or below the defined income threshold." Therefore, a unit is unavailable if it is either occupied by a household above the defined income threshold or is unaffordable. *The remainder of this report will simply refer to the compound concept of affordable and available housing as '**available housing**' with the understanding that affordability is a necessary condition of availability.*

Figure 27: The Relationship Between Affordability and Availability



The relationship between housing affordability and housing availability can be expressed using a four-quadrant 2x2 matrix. **Figure 27** depicts affordability on the vertical axis and availability on the horizontal axis. A housing unit with high housing costs and occupied by a household with an income above 80 percent of the area median income would fall into the first quadrant labeled "Not affordable and not available." A housing unit with housing costs less than or equal to 30 percent of a household's gross monthly income and is vacant would fall into the third quadrant labeled "Affordable and available." An affordable unit may also fall into the third quadrant if the current occupant has a household income approximately 3.333 times larger than the unit's gross monthly costs (1 ÷ 30 percent) because it is housing its intended income-targeted population. The second and fourth quadrants can be similarly understood. A housing unit in the second quadrant may be vacant, but its gross monthly housing costs are greater than 30 percent of the perspective occupant's household income. A housing unit in the fourth quadrant may have gross monthly housing costs less than or equal to 30 percent of a perspective occupant's household income, but it is already occupied by a non-low-income household.

DEFINING MODERATE INCOME HOUSING

The terms moderate-income housing and affordable housing are frequently used interchangeably in Utah, but they do not mean the same thing. As explained above, affordable housing is any housing unit whose costs are less than or equal to 30 percent of a perspective occupant's household income, but moderate-income housing has a precise definition under Utah's laws. Title 10, Chapter 9a, Part 1 of the Utah Code states:

> **'Moderate-Income Housing'** means housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80 percent of the median gross income for households of the same size in the county in which the city is located.[29]

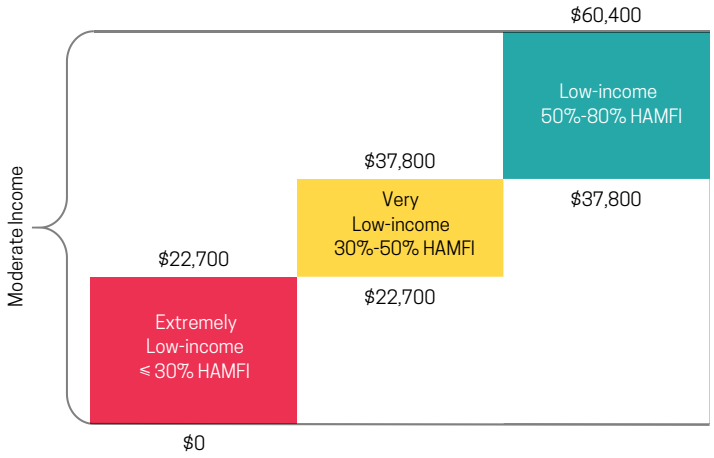
Moderate-Income Housing is best illustrated by example. To keep the math simple, suppose that the AMI of a county in Utah was $120,000, or, in other words, $10,000 per month. A household with a moderate-income at 80 percent of AMI in that county would have a monthly income of $8,000 and could afford to pay $2,400 per month in housing costs. However, a household with an income at 43.2 percent of AMI is also considered to have a moderate income, as are households with incomes at 61.9 percent of AMI and 23.6 percent of AMI. Respectively, each of these moderate-income households could afford housing costs of $1,296/month, $1,857/month, and $708 per month. Federal income limit regulations further refine the definition of moderate-income housing.

INCOME LIMITS

HUD has established income limits, which are the maximum income thresholds that qualify or disqualify a household for housing assistance benefits. [30] HUD uses the same formula to determine income limits for both Section 8 Housing Choice Vouchers and the HOME program. HUD also uses the income limits it publishes each year to determine program funding for each state. Although these three moderate-income groups are commonly referred to as low-income households, very low-income households, and extremely low-income households, to avoid confusion, it is more precise to refer to each group as a proportion of the HUD Adjusted Median Family Income (HAMFI): ⩽ 30 percent HAMFI, 30-50 percent HAMFI, and 50-80 percent HAMFI. A non-low-income household is any household that whose income is greater than 80 percent of HAMFI (> 80 percent HAMFI)

Technically speaking, HUD's income limits are not based on AMI. Income limits are based on the median family income of a county, adjusted for inflation, adjusted according to family size, adjusted to minimum thresholds per state, and then rounded. **Figure 28** depicts the three commonly used income limit groups based on a HUD Adjusted Median Family Income of $75,500 per year, or $6,291 per month. **Table 14** summaries HUD's Section 8 Income Limits adjusted for a household in Utah by county.

Figure 28: HUD Income Limit Groups in the State of Utah, FY 2018 (Median Income: $75,500)



Source: HUD (2018) Section8 income limits, FY 2018 [Data].

Table 14: Median Gross Rent Affordability by 2019 Section 8 Income Limits for a 4-person Household

County	Median Rent	0-30% HAMFI		30-50% HAMFI		50-80% HAMFI	
		Limit	%	Limit	%5	Limit	%5
Beaver	$625	$2,092	29.9%	$2,963	21.1%	$4,742	13.2%
Box Elder	$685	$2,092	32.7%	$2,963	23.1%	$4,742	14.4%
Cache	$708	$2,092	33.8%	$2,963	23.9%	$4,742	14.9%
Carbon	$635	$2,092	30.4%	$2,963	21.4%	$4,742	13.4%
Daggett	$338	$2,092	16.2%	$3,021	11.2%	$4,833	7.0%
Davis	$943	$2,092	45.1%	$3,254	29.0%	$5,208	18.1%
Duchesne	$853	$2,092	40.8%	$2,967	28.7%	$4,746	18.0%
Emery	$587	$2,092	28.1%	$2,963	19.8%	$4,742	12.4%
Garfield	$756	$2,092	36.1%	$2,963	25.5%	$4,742	15.9%
Grand	$729	$2,092	34.8%	$2,963	24.6%	$4,742	15.4%
Iron	$705	$2,092	33.7%	$2,963	23.8%	$4,742	14.9%
Juab	$773	$2,092	37.0%	$3,113	24.8%	$4,979	15.5%
Kane	$911	$2,092	43.5%	$2,963	30.7%	$4,742	19.2%
Millard	$622	$2,092	29.7%	$2,963	21.0%	$4,742	13.1%
Morgan	$1,043	$2,092	49.9%	$3,254	32.1%	$5,208	20.0%
Piute	$555	$2,092	26.5%	$2,963	18.7%	$4,742	11.7%
Rich	$608	$2,092	29.1%	$2,963	20.5%	$4,742	12.8%
Salt Lake	$970	$2,092	46.4%	$3,333	29.1%	$5,333	18.2%
San Juan	$620	$2,092	29.6%	$2,963	20.9%	$4,742	13.1%
Sanpete	$685	$2,092	32.7%	$2,963	23.1%	$4,742	14.4%
Sevier	$718	$2,092	34.3%	$2,963	24.2%	$4,742	15.1%
Summit	$1,262	$2,679	47.1%	$4,463	28.3%	$5,992	21.1%
Tooele	$847	$2,092	40.5%	$3,042	27.8%	$4,867	17.4%
Uintah	$978	$2,092	46.7%	$3,208	30.5%	$5,133	19.1%
Utah	$919	$2,092	43.9%	$3,113	29.5%	$4,979	18.5%
Wasatch	$1,152	$2,092	55.1%	$3,338	34.5%	$5,342	21.6%
Washington	$964	$2,092	46.1%	$2,963	32.5%	$4,742	20.3%
Wayne	$548	$2,092	26.2%	$2,963	18.5%	$4,742	11.6%
Weber	$795	$2,092	38.0%	$3,254	24.4%	$5,208	15.3%
State of Utah	$912	$1,888	48.3%	$3,146	29.0%	$5,033	18.1%

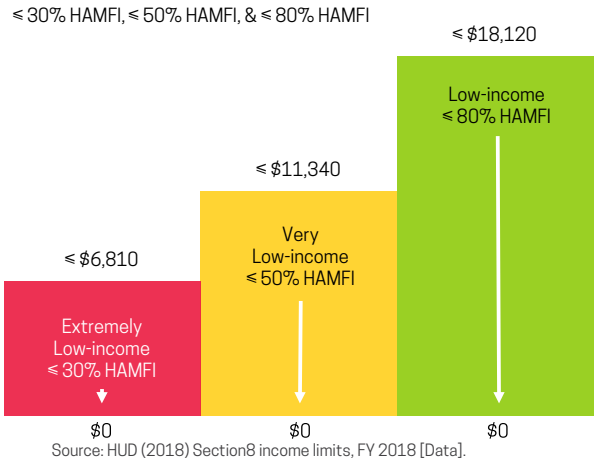
Source 1: HUD (2017) Section 8 income limits, FY 2017 [Data].
Source 2: USCB (2017) 2012-2016 American Community Survey [Data].
Note: Yellow indicates a cost burden >30% of household income and Red indicates a severe cost burden >50% household income.

Moderate Income Housing Cost Thresholds

Moderate-income housing cost thresholds are related to income limits. For purposes of this report, the difference between an income limit and an income threshold is that a housing cost threshold is based on all housing units that are affordable to households within a particular income limit range and below. So, any housing unit whose costs are below 30 percent of a particular household's gross monthly income is affordable for that household, regardless of that household's income limit group. A household in a higher income group could afford to rent housing units that would otherwise be affordable for households in lower income groups. Whenever higher-income households occupy housing units in a moderate-income housing cost threshold below what they could afford, they are limiting the supply of affordable housing units available to lower-income households.

As shown in **Figure 29**, a low-income household (50-80 percent HAMFI) earning $5,033 per month could afford to rent any housing unit between $0 and $ 1 ,510 per month because it is less-than 30 percent of its monthly income. A potential housing 'mismatch' could occur because that same household could also rent a unit that a lower income threshold could afford. Extremely low-income households (0-30 percent HAMFI) are major a concern for Utah because they earn about one-third the income of a low-income household. Nonetheless, if a low-income household spent more than $ 1,510 on housing costs, HUD would classify it as being cost-burdened. If that same household spent 50 percent or more of its monthly gross income on housing, i.e. $2,5 17 per month, HUD would classify it as severely cost-burdened.

Figure 29: Housing Cost to Income Thresholds



Source: HUD (2018) Section8 income limits, FY 2018 [Data].

FINDINGS

CHANGING INCOME SEGMENTS WITHIN UTAH'S RENTER POPULATION

KEY POINTS:

- Two-thirds of all renter households have moderate incomes.
- The number of moderate-income renter households is growing faster than non-low-income renter households and comprise a proportionally larger share of renter households each year.
- Households earning $22,700 or less per year—i.e. extremely low-income households—are the fastest growing segment of renter households.

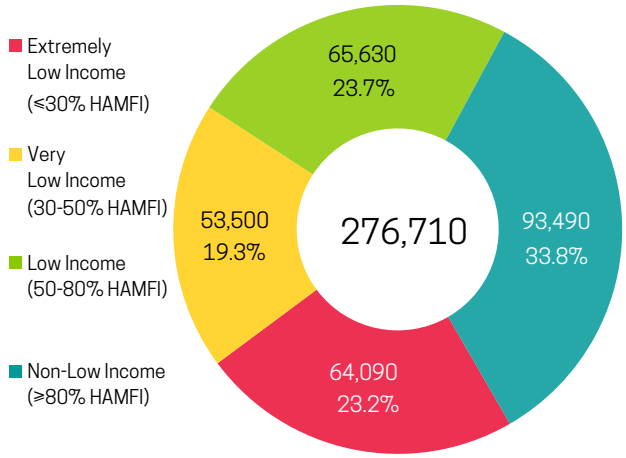
Utah's demographics are changing, and a shift in the income profile of renter households has accompanied these changes. On average 29.5 percent of all households in Utah were renter households according CHAS data. The proportion of renter households grew from 27.9 percent of 831,568 total households in 2009 to 30.5 percent of 906,292 households in 2015 at an average annual rate of 2.96 percent for a net increase of 44,275 renter households. Much of this growth can be attributed to moderate-income renter households, which grew from 18.1 percent of Utah's total households in 2009 to 20.2 percent of all households in 2015 at a rate of 3.29 percent per year for a net growth of 32,325 households.

In other words, moderate-income renters grew 0.92 percent per year faster than all non-low-income renters, and 0.33 percent per year faster than all renter households together. In fact, this segment grew 2.46 percent per year faster than all owner households, and 1.85 percent per year faster than all households combined.

The rates presented in this section identify trends among moderate-income households that are linked to the demand for affordable rental housing. They demonstrate, on average, that growth among the lowest income renter households is on the rise and is not a one-time occurrence. It also shows that the growth among income groups differs and is not evenly distributed. Assuming rising inflation, it suggests that allocating resources according to the expected demand of each income band is more likely to avert more costly problems later than merely distributing resources according to a snapshot of the current distribution of moderate-income renter households.

Growth in Moderate-Income Renter Households

Figure 30: State of Utah's Renter Households by Income Level



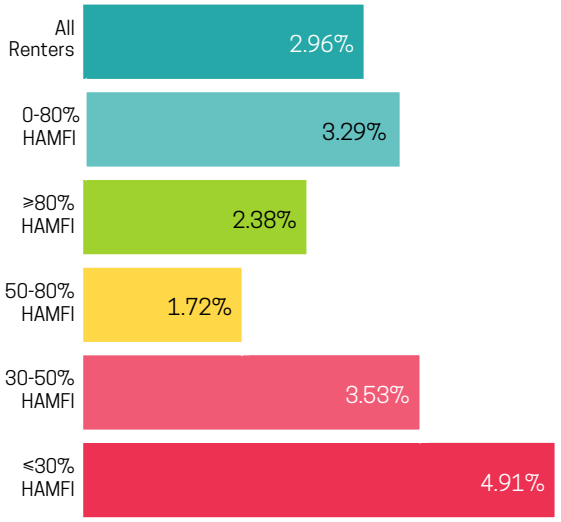
Source: HUD. (2018). 2011-2015 Comprehensive Housing Affordabilty Strategy [Data]

In 2015, there were 183,220 (66.2 percent) moderate-income renter households out of Utah's 276,710 renter households. These renter households were classified by HUD as having a moderate-income because they had a total household income below 80 percent of the HUD Adjusted Median Family Income of the county in which they resided. This segment of Utah's total renter households grew by 21.4 percent from 150,875 (64.9 percent) in 2009 to 183,220 (66.2 percent) in 2015 for a net growth of 32,325 households, as noted above. Within the moderate-income renter household segment, low-income households, 50-80 percent HAMFI, grew 10.6 percent between 2009 and 2015 for a net increase of 6,305 households or 19.5 percent of the total growth in moderate-income renter households. Very low-income renters, 30-50 percent HAMFI, grew 23.1 percent for a net increase of 10,045 households, which was 31.1 percent of all moderate-income renter household growth. And, extremely low-income renters, ≤ 30 percent HAMFI, grew 33.2 percent with a net increase of 15,975 households, which represents 49.4 percent of all moderate-income renter household growth between 2009 and 2015. Although the combined growth of households in the moderate-income group accounted for most of the growth in Utah's total renter households, it is more important to understand their rates of growth and the proportional changes in the shares of these households.

Renter Household Annual Growth Rates

Annual growth rates deal with the average increase in the number of households each year over a period of several years. For example, the total number of renter households in Utah grew by 19.0 percent between 2009 and 2015, which is an average annual growth rate of 2.96 percent per year, for a net increase of 44,275 households. **Table 15** shows that extremely low-income renter households grew at a rate of 4.91 percent per year, which was 1.95 percent faster than the overall growth of all renter households in Utah. Very low-income renter households, 30-50 percent HAMFI, grew at 3.53 percent per year, outpacing total renter growth by 0.57 percent per year. Low-income renter households, 50-80 percent HAMFI, grew at 1.72 percent per year, but -1.24 percent slower than all renter households. Non-low-income renter households also grew at a rate of 2.38 percent per year, but it was -0.58 percent slower per year than all renter households.The most important takeaway from this subsection is that extremely low-income renter households are growing at a high rate. They are growing 2.53 percent faster than non-low-income renter households. In other words, they are growing 2.06 times faster. The good news is that last year Utah expected extremely low-income households to grow at an average rate of 5.33 percent per year, which means that the state has -1,541 fewer extremely low-income renter households than it anticipated. This may suggest that there has been a slight improvement in the average household income for this population. Even with a revised average annual growth rate, the state should expect to see as many as 22,967 additional extremely

Figure 31: Average Annual Growth Rate of Moderate-Income Renter Households in Utah



Source: HUD. Comprehensive Housing Affordable Strategy, 2009 thru 2015 [Data]

Table 15: Average Annual Growth of Moderate-Income Renter Households in Utah

Income Group	2009	2010	2011	2012	2013	2014	2015	Average	AAGR
≥80% HAMFI	81,540	89,675	93,095	90,650	92,355	92,960	93,490	90,537.9	2.38%
50-80% HAMFI	59,325	61,625	61,270	63,025	62,115	63,975	65,630	62,423.6	1.72%
30-50% HAMFI	43,455	45,765	46,980	48,810	50,750	52,335	53,500	48,799.3	3.53%
≤30% HAMFI	48,115	50,600	53,555	57,915	59,695	62,315	64,090	56,612.1	4.91%
All Renters	232,435	247,665	254,900	260,400	264,915	271,585	276,710	258,372.9	2.96%

Source: HUD. Comprehensive Housing Affordable Strategy, 2009 thru 2015 [Data]

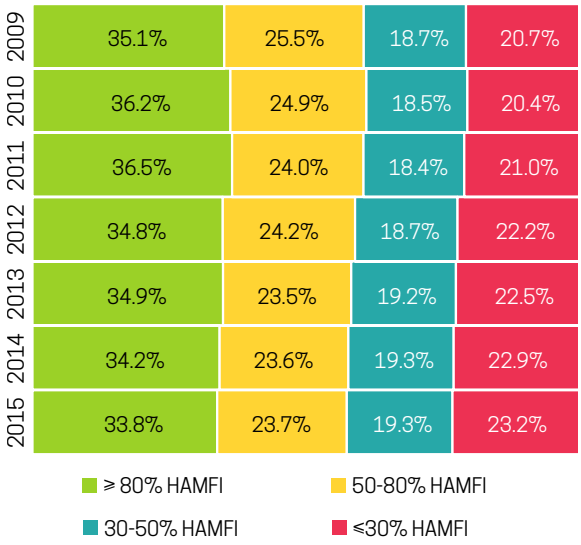
low-income households by 2023. That would be a total of 87,057 extremely low-income households according to a simple linear trend analysis. This analysis showed an average trend of 2,767 households per year were being added to Utah's population of extremely low-income households between 2009 and 2015.

Proportional Change of Moderate-Income Households and Change per 1,000 Renter Households

Proportional change rates deal with how the percentages or shares of all income limit groups have changed over time. For instance, 20.7 percent of all renters in Utah were extremely low-income renter households in 2009, but by 2015, that number had grown to 23.2 percent. In contrast, 25.5 percent of all renters in Utah were low-income households in 2009, but by 2015 that number had shrunk to 23.7 percent. Analyzing proportional change rates helps the state determine whether growth is evenly distributed across all income groups or whether it is concentrating in one or more groups over time. It also helps policymakers know whether a county's distribution of moderate-income households is following state trends. A graph like **Figure 32** makes it easier to see these proportional changes.

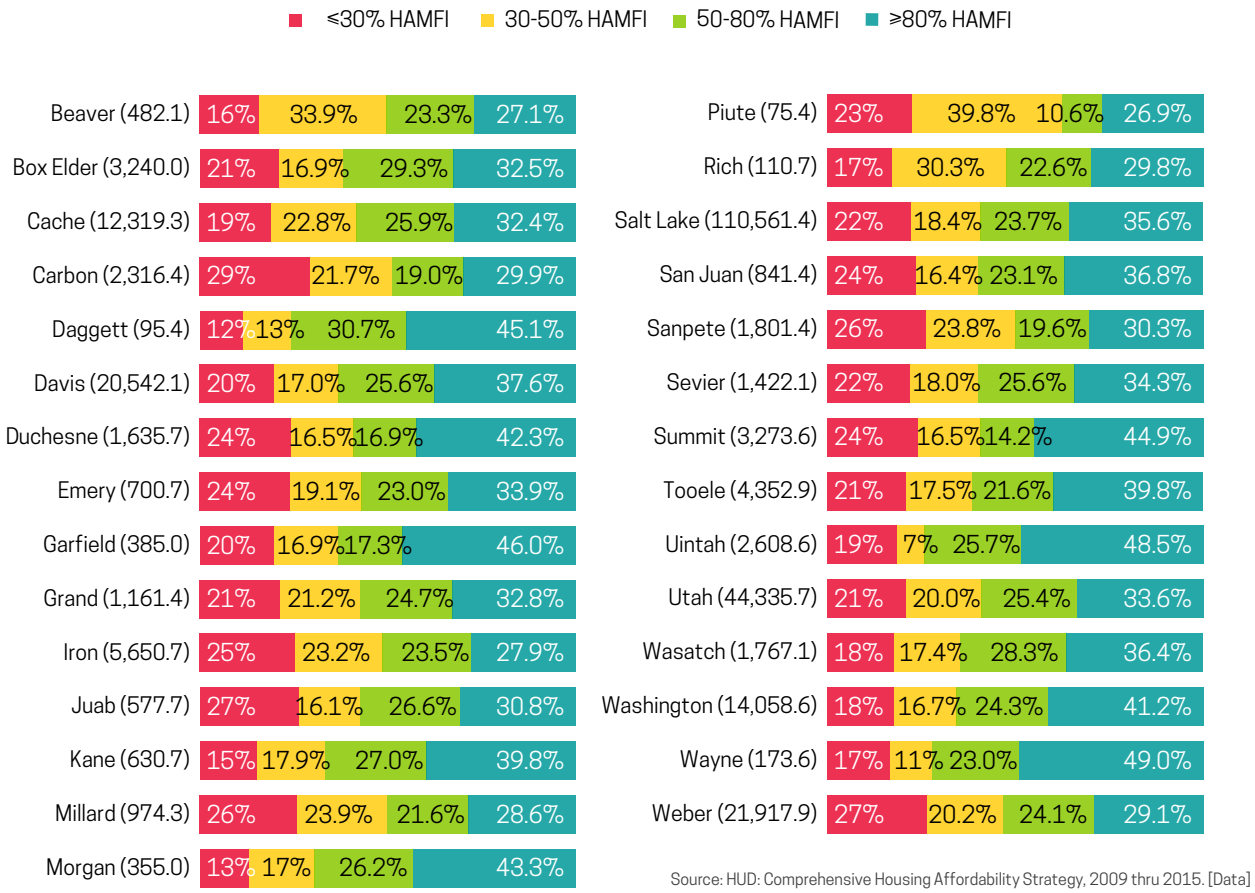
Speaking of the distribution of moderate-income households in Utah's counties, **Figure 33** visualizes the proportion of each income limit group across the state. This graph clearly shows that income limit groups are not evenly distributed across the state. Some counties like Wayne, Garfield and Uintah counties have a significantly above average portion of non-low-income renter households. However, a large portion of non-low-income renters may be a signal that there is not enough workforce housing in these counties for those households to purchase. In contrast, Iron, Beaver and Piute Counties have significantly below average portions of non-low-income renter households. At 38.9 percent of its renter population, Piute County is notable for the fact that it has the highest proportional concentration of very low-income renter households in the state. It also has one of the lowest concentrations of low-income and non-low-income renter households. Daggett, Morgan and Kane Counties have significantly below average concentrations of extremely low-income rental households. Carbon, Juab and Weber all have higher-than-expected concentrations of extremely low-income households, which may mean that subpopulation of renters is more likely to be severely cost burdened in those counties.

Figure 32: Proportional Change in Renter Household Income Groups



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2014 [Data]

Figure 33: Average Share of Renter Households by Income Group and County



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]

RISING COST BURDENS

KEY POINTS:

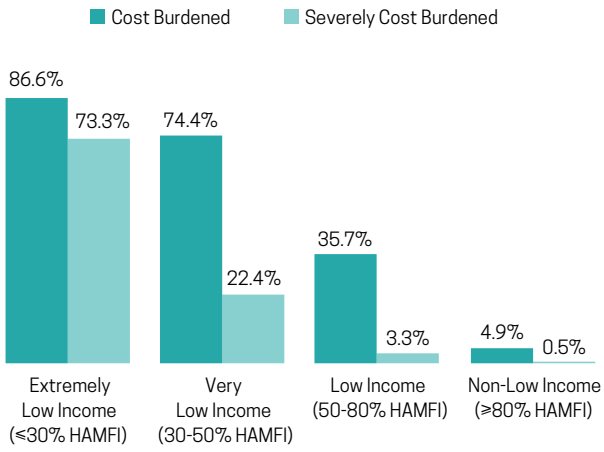
- The housing cost burdens of moderate-income renter households did not improve between 2009 and 2015, and their cost burdens are not expected to improve significantly in the near future.
- Extremely low-income households (0-30 percent HAMFI) are 9.4 times more likely to be cost-burdened by their rent than non-low-income households.
- Extremely low-income households (0-30 percent HAMFI) are 76.6 times more likely to be severely cost-burdened by their rent than non-low-income households.

A part of understanding housing affordability is understanding cost burdens. Recall that a cost-burdened household is any household that must expend more than 30 percent of its gross monthly income on housing costs. Also recall that severely cost-burdened households spend more than 50 percent of their monthly income on housing costs. The greater a household's housing cost burden, the less money it has to spend on other needs such as bills, transportation and groceries.

Lower income renter households are more likely to spend more than 30 percent of their gross income on housing costs than higher income households. Using 2015 CHAS data, **Figure 34** shows that the portion of cost-burdened renter households declines in accordance with income. Extremely low-income renter households were 12.2 percent more likely to be cost-burdened by housing than very low-income households. Very low-income households were 38.7 percent more likely to be cost-burdened than low-income renters. And, low-income renters were 30.8 percent more likely to be cost-burdened than non-low-income renter households.

It's also important to note that cost-burdened and severely cost-burdened households are not mutually exclusive groups. That is to say that all severely cost-burdened households are counted as being cost-burdened, however, not all cost-burdened households are severely cost-burdened as shown in **Figure 34**. This also means that on average, 85.7 percent of cost-burdened ELI households were also severely cost-burdened on average. Also, 33.0 percent of cost-burdened VLI renters were also severely cost-burdened. Interestingly, only 9.6 percent of cost-burdened low-income households were severely cost-burdened while 10.5 percent of cost-burdened non-low-income renters were also severely cost-burdened. However, there were 4.1 times as many severely cost-burdened low-income renters (2,210.7) as there were non-low-income renters (545.7). There were 22.2 times as many severely cost-burdened very low-income renter households (2,210.7) as there were non-low-income renters. Finally, extremely low-income renters (41,810.7) were 76.6 times more likely to be severely cost-burdened as non-low-income renter households on average.

Figure 34: State of Utah's Proportion of Cost Burdened Renter Households



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]

Table 16 shows the raw growth of cost-burdened renter households since 2009 in Utah. Each income group has progressively added to the number of cost-burdened renter households each year and are expected to continue to do so into the near future. The non-low-income group added 58.8 new cost-burdened households per year on average (1.8 percent AAGR) and it has the potential of reaching 5,784 households by 2023, if housing trends persist. The low-income group added 770.5 new cost-burdened households per year on average (4.4 percent AAGR) and it has the potential of reaching 30,657 households by 2023. The very low-income group added 1,364.1 new cost-burdened households per year on average (3.9 percent AAGR) and it has the potential of reaching 50,382 households by 2023. The extremely low-income group added 2,565.2 new cost-burdened households per year on average (5.8 percent AAGR) and it has the potential of reaching 74,423 households by 2023. If the number of cost-burdened extremely low-income households reached that size, it would be a net increase of 33,623 households, or an 82.4 percent increase over 2009's estimate.

Table 17 shows the growth of severely cost-burdened renter households over time in Utah. Like cost-burdened households, each income group can expect to add even more severely cost-burdened households by 2023. Fortunately, they are not expected to increase at the same rate. Between 2009 and 2015, the non-low-income group added only 11.3 new cost-burdened households per year on average (3.3 percent AAGR) and it has the potential of reaching 658 households by 2023, assuming current conditions in the housing remain the same. The low-income group added 41.6 new cost-burdened households per year on average (1.9 percent AAGR) and it has the potential of reaching 2,627 households by 2023. The very low-income group added 477.9 new cost-burdened households per year on average (5.4 percent AAGR) and it has the potential of reaching 16,919 households by 2023. The extremely low-income group added 2,224 new cost-burdened households per year on average (5.4 percent AAGR) and it has the potential of reaching 64,052 households by 2023. If the extremely low-income group reached that size, it would be a net increase of 29,677 households, or 86.3 percent increase over 2009.

Table 16: Growth in Cost-burdened Renter Households in Utah, 2009-2016

Year	≥80% HAMFI	50-80% HAMFI	30-50% HAMFI	≤30% HAMFI
2009	4,325	18,360	31,690	40,800
2010	5,095	21,405	34,410	43,110
2011	5,655	23,865	35,610	46,010
2012	5,365	24,875	37,135	50,145
2013	6,010	24,385	38,775	51,735
2014	5,320	24,365	39,775	54,080
2015	4,605	23,405	39,790	55,520
Average	5,196.4	22,951.4	36,740.7	48,771.4

Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]

Table 17: Growth in Severely Cost-burdened Renter Households in Utah, 2009-2016

Year	≥80% HAMFI	50-80% HAMFI	30-50% HAMFI	≤30% HAMFI
2009	430	1,995	9,060	34,375
2010	560	2,165	11,240	36,870
2011	570	2,090	12,855	39,610
2012	550	2,175	13,140	43,515
2013	615	2,670	13,480	44,860
2014	605	2,240	13,200	46,445
2015	490	2,140	12,005	47,000
Average	545.7	2,210.7	12,140.0	41,810.7

Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]

Table 18 provides an overview of the average share of renter households in each income group that are cost-burdened and severely cost-burdened by county. It shows that Cache (89.4 percent), Davis (88.9 percent), and Rich (99.3 percent) counties have the highest rates of cost-burdened extremely low-income renter households on average. It also shows that Utah (77.9 percent), Washington (80.9 percent), and Rich (91.1 percent) counties have the highest rates of severely cost-burdened extremely low-income renter households on average. Nonetheless, the following counties in Utah have the highest overall rates of cost-burdened and severely cost-burdened renters in Utah, in all income groups, on average:

Cost-Burdened Households:

- Washington County, 6,713 (47.8 percent)
- Utah County, 20,606 (46.4 percent)
- Salt Lake County, 50,975 (46.0 percent)

Severely Cost-Burdened Households:

- Grand County, 284 (24.3 percent)
- Utah County, 10,589 (23.8 percent)
- Washington County, 3,312 (23.4 percent)

The following cities in Utah have the highest rates of cost-burdened and severely cost-burdened renters in Utah, in all income groups, on average:

Cost-Burdened Households:

- Monroe, 67 (68.6 percent)
- Cedar Hills, 157 (65.5 percent)
- Kamas, 136 (63.0 percent)

Severely Cost-Burdened Households:

- Sunset, 165 (32.1 percent)
- Highland, 92 (31.5 percent)
- Mona, 13 (31.0 percent)

Table 18: Average Severity of Housing Cost Burdens by Share of Income Group and County in Utah, 2009-2015

County	Cost-Burdened			Severely Cost-Burdened		
	50-80%	30-50%	0-30%	50-80%	30-50%	0-30%
Beaver	45.8%	65.8%	83.8%	0.0%	0.0%	74.5%
Box Elder	11.0%	57.1%	76.0%	0.9%	19.6%	55.4%
Cache	33.6%	73.4%	89.4%	5.5%	18.4%	76.2%
Carbon	16.5%	54.1%	73.0%	0.1%	7.5%	56.6%
Daggett	57.5%	41.9%	68.6%	0.0%	5.7%	50.5%
Davis	33.2%	77.4%	88.9%	1.0%	21.3%	72.0%
Duchesne	31.7%	68.3%	72.3%	1.2%	29.6%	57.9%
Emery	8.9%	39.9%	84.9%	0.0%	5.4%	61.1%
Garfield	15.1%	31.4%	67.9%	0.0%	0.7%	47.9%
Grand	36.2%	76.5%	67.3%	4.9%	43.8%	61.8%
Iron	31.5%	65.2%	85.1%	2.2%	15.1%	63.2%
Juab	12.1%	68.2%	59.3%	2.5%	25.1%	52.4%
Kane	36.6%	63.1%	67.1%	0.0%	17.7%	40.8%
Millard	16.3%	37.9%	70.2%	5.3%	11.0%	41.9%
Morgan	18.1%	66.1%	67.1%	3.9%	10.3%	67.1%
Piute	0.0%	39.8%	61.7%	0.0%	0.0%	42.9%
Rich	13.1%	37.6%	99.3%	5.5%	17.6%	91.1%
Salt Lake	39.4%	81.6%	88.0%	3.3%	27.6%	77.5%
San Juan	9.5%	27.4%	72.9%	0.0%	9.1%	56.3%
Sanpete	14.3%	42.0%	74.2%	0.4%	6.2%	57.4%
Sevier	19.1%	58.3%	74.2%	0.0%	4.5%	57.2%
Summit	36.3%	60.2%	86.5%	2.6%	21.7%	63.7%
Tooele	36.6%	64.1%	76.6%	0.7%	13.4%	62.5%
Uintah	30.1%	59.1%	84.7%	7.5%	37.2%	72.2%
Utah	40.8%	77.4%	86.7%	5.2%	29.7%	77.9%
Wasatch	44.1%	82.1%	86.5%	9.3%	33.4%	76.5%
Washington	54.7%	79.2%	86.7%	8.2%	38.7%	80.9%
Wayne	7.3%	31.4%	82.3%	0.0%	9.5%	39.4%
Weber	23.6%	62.6%	83.5%	1.1%	14.6%	66.5%
State of Utah	36.7%	75.3%	86.1%	3.5%	24.8%	73.8%

Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]
Note: Red indicates the 3 highest rates, Green indicates the 3 lowest rates.

The important takeaway of this subsection is that the housing cost burdens of moderate-income renter households did not improve between 2009 and 2015, and based on prevailing trends, their cost burdens are not expected to improve significantly in the near future without an intervention. Overall, the number of cost-burdened renter households has increased by 4,759 households per year on average (4.5 percent AAGR) and it has the potential of reaching 161,246 households by 2023. If the number of cost-burdened extremely low-income households reached that size, it would be a net increase of 66,071 households, or a 69.4 percent increase over 2009's estimate. The total number of severely cost-burdened renters in Utah has increased by 2,758 households per year on average (5.1 percent AAGR) and it has the potential of reaching 84,255 households by 2023. If the number of severely cost-burdened renter households reached that figure, it would be a net increase of 37,612 households, or an 83.7 percent increase over 2009's estimate.

THE MISMATCH IN AFFORDABLE AND AVAILABLE RENTAL UNITS

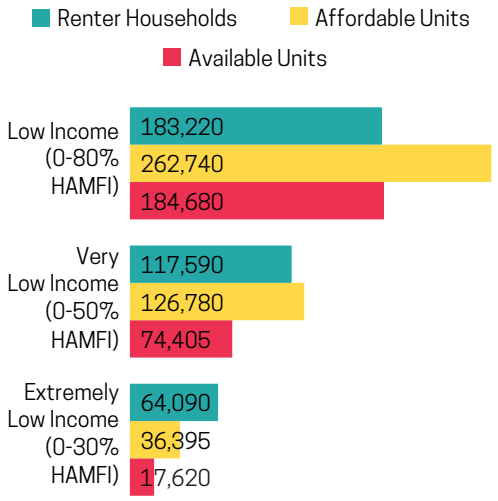
KEY POINTS:

- A housing gap occurs when there are more renters at a particular income threshold than there are affordable or available housing units.
- A housing mismatch occurs when households at the various income thresholds are not occupying the rental units they supposedly could afford to rent.
- 78,060 rental units that moderate-income households, at 0-80 percent HAMFI, could nominally afford to rent are mismatched with households that technically could afford to pay a higher rent.

A housing gap occurs when there are more renters at a particular income threshold than there are affordable or available housing units. In 2015 there were 183,220 moderate-income renter households at the 0-80 percent HAMFI threshold (see **Figure 35**). There were 262,740 rental units that households at the 0-80 percent HAMFI threshold could afford, or 143.4 rental units for every 100 renter households at that threshold as shown in **Figure 39** later in this section. However, there were only 184,680 units that were both affordable and available to rent, or 100.8 units per 100 renters in that income threshold. This means that 78,060 units that would have otherwise been affordable for households at the 0-80 percent HAMFI threshold were not available because they were occupied by non-low-income households—i.e. mismatched.

Households in the middle- and upper-income groups that occupy housing that's affordable for lower income groups exacerbate Utah's housing gap. So, even if there were a sufficient number of affordable housing units on the market, many of those units would be mismatched with their occupants by income group, i.e. they are not being occupied by the targeted population. In 2015, there were 52,375 units that would otherwise have been affordable for very low-income households, but were occupied by higher-income households. Similarly, 18,775 affordable rental units were unavailable for households at the 0-80 percent HAMFI threshold to rent because they were mismatched with households that have a higher income.

Figure 35: State of Utah's Affordable and Available Rental Housing Gap



Source: HUD. (2018). 2011-2015 Comprehensive Housing Affordabilty Strategy [Data]

The supply of affordable or available housing is increasingly falling behind the demand at each income threshold over time. How much the gap widens depends on the year and the income group. As we already know, the number of renter households in lower income bands is growing faster than the non-low-income band. The bad news is that the supply categorically grew at a slower rate than renter households between 2009 and 2015.

Table 19, Table 20 and Table 21 show Utah's renter growth by income thresholds compared to the supply of affordable units and available units for each year between 2009 and 2015. But, looking at the linear rates of growth, one sees that renter households were growing by 5,322 per year and available units were growing by 4,941 per year which created a deficit of 956 units of housing each year. The only reason there is not a greater deficit in available

Table 19: Mismatch of Renter Households with Affordable and Available Rental Units at the 0-30% HAMFI Income Threshold Over Time

Year	Renter Households	Affordable Units	Available Units	Mismatched Units
2009	48,105	31,791	14,389	17,402
2010	50,615	32,712	14,870	17,842
2011	53,559	32,776	14,834	17,942
2012	57,915	33,526	15,673	17,853
2013	59,684	33,847	15,800	18,047
2014	62,315	34,978	16,785	18,193
2015	64,090	36,395	17,620	18,775
Average	56,611.9	33,717.9	15,710.1	18,007.7

Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]

Table 20: Mismatch of Renter Households with Affordable and Available Rental Units at the 0-50% HAMFI Income Threshold Over Time

Year	Renter Households	Affordable Units	Available Units	Mismatched Units
2009	91,565	117,535	64,345	53,190
2010	96,380	110,167	60,749	49,418
2011	100,544	104,636	58,939	45,697
2012	106,730	109,664	64,082	45,582
2013	110,429	110,631	65,631	45,000
2014	114,650	117,256	69,249	48,007
2015	117,590	126,780	74,405	52,375
Average	105,412.6	113,809.9	65,342.9	48,467.0

Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]

housing in this income group is because the expected baseline was 149,248 and the expected baseline of renter households was 146,546, a surplus of 2,702 units. If the current trend persists, there will be 221,052 low-income households in all three income groups, but there will only be 218,419 available housing units by 2023.

For renter households at 50 percent or below HAMFI, there has not been a consistent surplus of affordable housing. There was a significant drop in surplus units in 2011. From 2011 to 2014 the surplus of affordable housing narrowed considerably but appears to have improved somewhat in 2015. The supply of available rental housing has grown somewhat, but far below the needs of renter households at or below this level. The linear rates of growth indicate that renter households grew by 4,446 households per year while available units grew by 1,924 units per year, which is widening the housing gap for this income threshold by 2,522 units per year. If the current trend persists, there will be 149,877 households at 0-50 percent HAMFI, but there will only be 84,583 available housing units for them by 2023.

Each year between 2009 and 2015, there was a substantially lower supply of affordable housing units than there were renter households at the 0-30 percent HAMFI income threshold. From 2009 to 2015, the gap in affordable housing has only widened. The supply of available rental housing has stagnated and remained far below that of renter households at 30 percent or below HAMFI. The linear rates of growth indicate that ELI renter households grew by 2,767 households per year while available units grew by 518 units per year, which is widening the available housing gap by -2,250 units per year. If the current trend persists, there will be 84,283 extremely low-income households by 2023, but there will only be 20,885 available housing units for them.

Table 21: Mismatch of Renter Rouseholds with Affordable and Available Rental Units at the 0-80% HAMFI Income Threshold Over Time

Year	Renter Households	Affordable Units	Available Units	Mismatched Units
2009	150,875	225,335	155,801	69,534
2010	158,000	233,491	159,104	74,387
2011	161,819	236,994	161,363	75,631
2012	169,749	244,105	170,018	74,087
2013	172,548	247,217	172,947	74,270
2014	178,624	254,828	179,165	75,663
2015	183,220	262,740	184,680	78,060
Average	167,833.6	243,530.0	169,011.1	74,518.9

Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015. [Data]

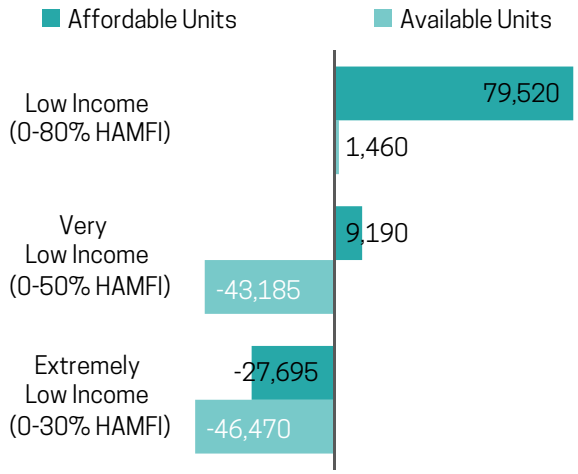
UTAH'S SHORTAGE OF AFFORDABLE AND AVAILABLE RENTAL HOUSING

KEY POINTS:

- Utah has a shortage of 27,695 affordable rental units and a deficit of 46,470 available units for extremely low-income renter households (0-30 percent HAMFI)
- Utah has a surplus of 79,520 affordable rental units but only 1,460 units are available for all moderate-income renter households (0-80 percent HAMFI) to rent
- Even with a housing voucher, the majority of households under the 50 percent and 30 percent HAMFI income thresholds could not rent most of the state's "surplus" affordable housing units because 78,060 rental units are mismatched with the wrong income group.
- Housing trends suggest that the shortage of affordable and available rental housing will worsen for extremely low-income households.

How bad is Utah's rental housing deficit? In Utah, the affordability of housing is better for those with higher incomes, but far worse for those at the lowest income levels. According to 2015 CHAS data, Utah has a surplus of 79,520 affordable rental housing units for all moderate-income renter households with incomes between zero and 80 percent of HAMFI, as depicted in **Figure 36**. **It also shows that Utah has a shortage of 46,470 available rental units for households with income between 0 and 30 percent HAMFI.**

Figure 36: State of Utah's Affordable and Available Rental Housing Deficit



Source: HUD (2018) 2011-2015 Comprehensive Housing Affordability Strategy [Data]

The obvious question many people ask is why can't the State simply subsidize extremely low-income households with enough housing vouchers so they can rent a portion of the 79,520 'surplus' affordable units listed in the 0-80 percent HAMFI category. If things were simple, one could subsidize 27,695 extremely low-income housing population and leave Utah with a 51,825 unit surplus. Unfortunately, it is not so simple. As explained previously, affordability and availability are related concepts but they are not the same thing. Units that may be affordable at a lower income threshold are often occupied by a household with a higher income. Because some non-low-income households occupy affordable units, only 1,460 units are actually available for all moderate-income households (0-80 percent HAMFI)—and many of those are not affordable for very low- and extremely low-income renter households. This means that 78,060 rental units are mismatched with the wrong income group. Consequently, reducing Utah's housing shortage not only requires more affordable housing units but also improving the availability of those units.

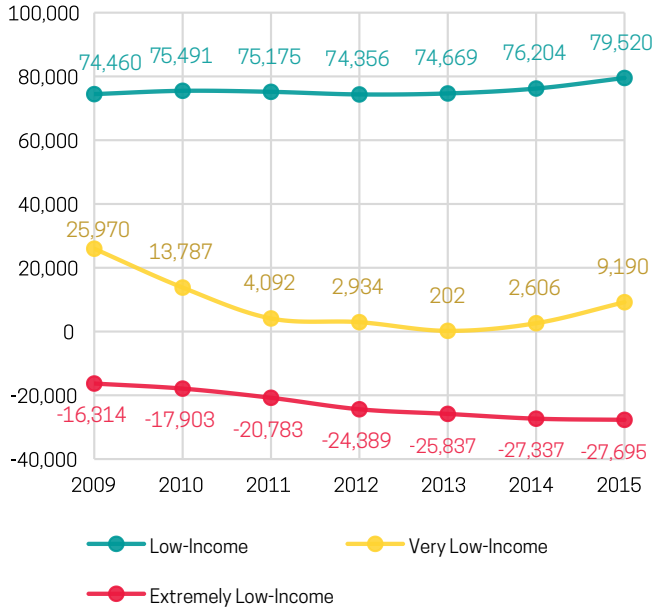
Figure 36 indicates that the majority of rental units considered to be "affordable" in Utah are priced for households in the categories closest to the median income. Even then, some of those units may also be occupied by households with higher incomes. Because there are still 1,460 available units leftover in this threshold category there are sufficient available housing units for households earning 50-80 percent of HAMFI to afford a housing unit—which is the appropriate income group for that threshold—and a number of non-low-income households who probably should be renting a unit that is more commensurate with their income.

Figure 36 also shows a positive number of affordable housing units in the 0-50 percent HAMFI threshold category. But, it shows a negative number for available very low-income households as well. Tentatively, there are 9,190 units affordable for households earning approximately less than $37,800 per year. However, the graph also indicates that despite there being some affordable housing units in this category none are actually available. In fact, Utah is at least -43,185 housing units short of meeting the housing needs of its population of very low-income and extremely low-income households.

The estimated average housing shortage stated in the 2017 affordable housing assessment, data from each CHAS dataset between 2009 and 2014 was 39,973.7 available units for households at or below 30 percent HAMFI. With the addition of the 2015 CHAS dataset, we've revised the seven-year average housing deficit to 40,901.7 available units for extremely low-income households to use as a measure of deviation from the norm. In other words, Utah's deficit of extremely low-income housing units diverged from the seven-year average by 5,568.3 units.

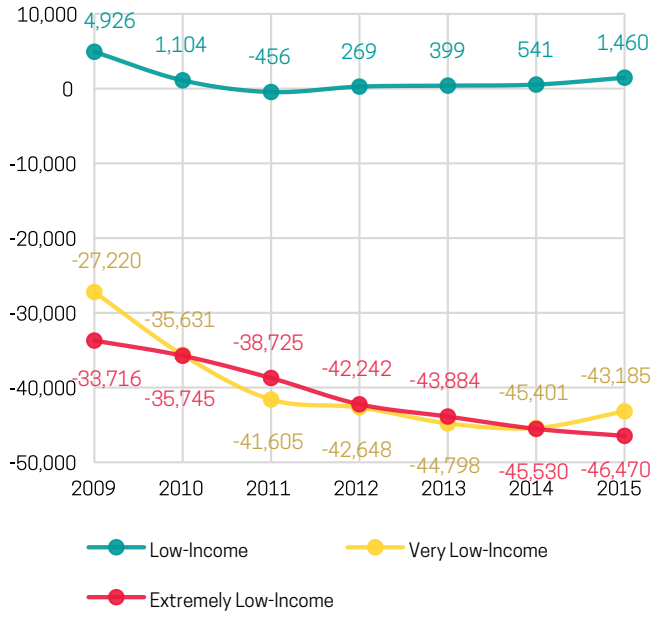
Figure 37 and Figure 38 provide a longitudinal glimpse of the housing deficit of each of the three moderate-income thresholds for the last several years. As shown in Figure 38, the estimated shortage of housing for extremely low-income households at or below 30 percent HAMFI was 45,530 according to 2014 CHAS data. **Based on 2015 CHAS data series, Utah has -46,470 available rental housing units for this population. This is to say that the gap has widened by 940 rental housing units since 2014.** Assuming a linear trend in Utah's extremely low-income household growth and affordable and available rental housing unit growth, the gap has been widening at a rate of -2,249.7 units per year since the 2009, on average. Based on linear growth estimates of both renter households and rental units, the supply of available housing units for extremely low-income households at or below 30 percent HAMFI is expected to be -54,400 in 2019 and is expected to be -63,399 by 2023.

Figure 37: Estimated Trend in the Surplus/ Deficit of Affordable Rental Housing



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015 [Data]

Figure 38: Estimated Trend in the Surplus/ Deficit of Available Rental Housing



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015 [Data]

Table 22: Utah's Deficit of Affordable and Available Rental Housing Units by County

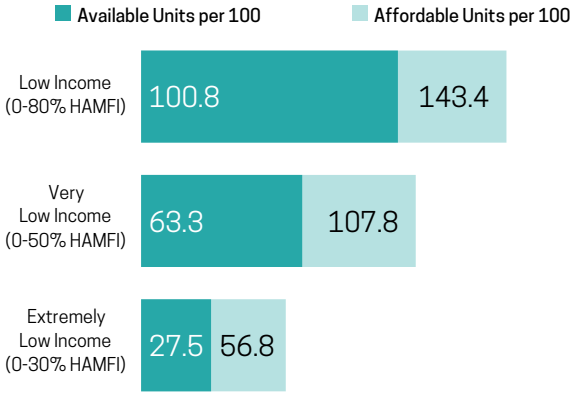
County	Affordable Housing Units			Available Housing Units		
	≤30% HAMFI	≤50% HAMFI	≤80% HAMFI	≤30% HAMFI	≤50% HAMFI	≤80% HAMFI
Beaver	200	235	195	0	50	65
Box Elder	25	1,500	1,295	-395	40	260
Cache	-1,155	1,845	3,350	-2,110	-1,315	120
Carbon	75	675	885	-190	75	175
Daggett	0	0	10	0	4	4
Davis	-2,150	1,505	6,630	-3,475	-2,985	50
Duchesne	9	384	724	-216	-101	64
Emery	140	385	355	-10	145	175
Garfield	80	175	134	-15	25	49
Grand	-10	190	495	-180	-30	150
Iron	-180	1,100	1,750	-915	-260	480
Juab	45	155	175	-70	-15	14
Kane	45	185	274	-30	30	69
Millard	125	355	300	-40	-5	45
Morgan	-10	50	140	-65	-75	-26
Piute	15	29	45	-5	-1	13
Rich	29	44	14	-11	14	9
Salt Lake	-16,575	-4,005	33,715	-21,925	-23,205	270
San Juan	140	460	385	-55	45	95
Sanpete	125	680	595	-280	-90	85
Sevier	0	460	525	-205	-45	75
Summit	40	1,085	1,610	-355	260	490
Tooele	-145	795	2,025	-505	-185	430
Uintah	-100	615	1,430	-255	-115	260
Utah	-4,720	-2,420	10,855	-8,560	-10,655	-2,220
Wasatch	-270	-220	765	-415	-440	20
Washington	-995	-1,005	3,945	-2,100	-2,690	-490
Wayne	35	130	78	0	34	41
Weber	-2,540	3,745	6,750	-4,095	-1,730	640

Source: HUD (2018) 2011-2015 Comprehensive Housing Affordability Strategy [Data]
Note: The three lowest estimates in each income threshold are highligted in 'Red' and the three highest estimates are highlighted in 'Green'.

An examination of CHAS data for each of the 29 counties in Utah by renter households revealed patterns of affordability and availability in rental housing consistent with the state as a whole. **Table 22** shows that all 29 counties had an adequate supply of affordable housing for moderate-income renter households at the 0-80 percent HAMFI threshold in 2015. However, 12 counties carried affordable housing deficits for households at the 0-30 percent of HAMFI threshold. Taking availability into consideration, 26 counties had a surplus of available housing at or below 80 percent HAMFI. 18 counties carried a deficit of available housing at 0-50 percent HAMI or below and 26 counties carried a deficit of housing for extremely low-income rental households. Only three counties technically had a surplus of available units in 2015. However, no county had a surplus of available rental housing units for households at 0-30 percent HAMFI. Beaver, Daggett and Wayne counties did not have a deficit of available housing for ELI households, unfortunately they also did not have a surplus. In terms of raw numbers, Weber, Utah and Salt Lake counties had the widest gap in housing availability at 0-30 percent of HAMFI with -4,095, -8,560, and -21,925 units available respectively. The more pressing gap is the gap in extremely low-income housing at or below 30 percent of HAMFI.

MISMATCH RATIO: THE RATE OF AFFORDABLE RENTAL UNITS AVAILABLE TO MODERATE-INCOME HOUSEHOLDS IN UTAH

Figure 39: State of Utah's Rate of Affordable & Available Rental Units per 100 Renter Households

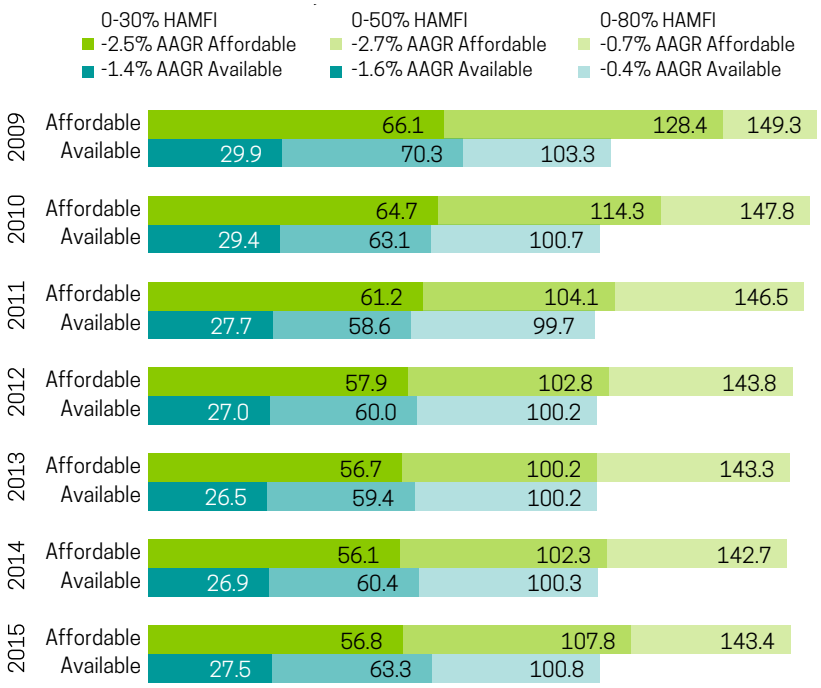


Source: HUD. (2018). 2011-2015 Comprehensive Housing Affordability Strategy, 2009 thru 2015 [Data]

Calculating the rate of affordable and available units per 100 renter households provides for fair comparisons, as illustrated in **Figure 39**, **Figure 40**, and **Figure 41**. It eliminates differences among group sizes that may exaggerate the relative size of a problem from one income threshold to another and one county to another, assessing growth over time.

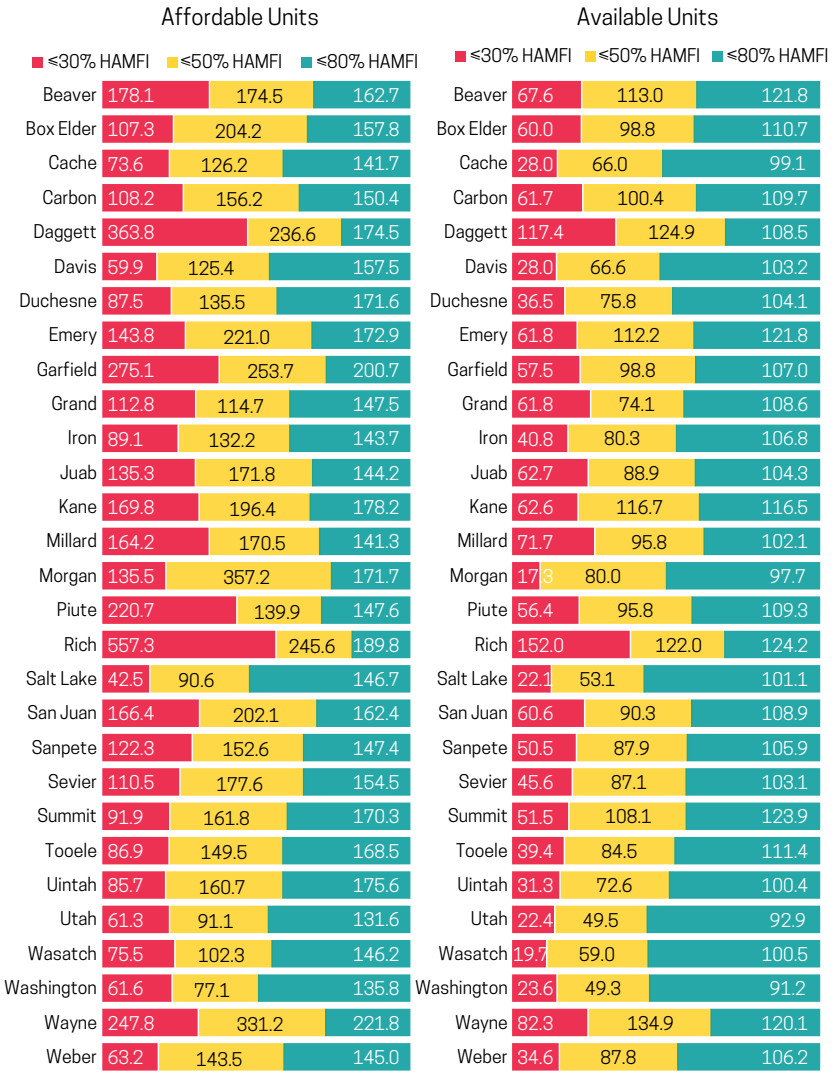
Rates of affordable and available housing per 100 renter households also make it possible to calculate how significantly the state's distribution of housing at each threshold deviates from year to year. Data from the 2015 CHAS in Figure 39 shows that the rate of affordable units for households at 0-80 percent of HAMFI was 143.4 units, but there were only 100.8 available units per 100 renters; which means that there is

Figure 40: Utah's Rate of Affordable & Available Units Per 100 Renter Households by Income Threshold Over Time



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015 [Data]

Figure 41: Average Rate of Affordable and Available Rental Units Per 100 Renter Households by County in Utah



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2015 [Data]

an adequate supply of available housing units for all moderate-income renters. This math, however, does not consider the percentage of those households that are cost-burdened or severely cost-burdened. Based on the earlier cost burden subsection, 43.9 percent of those 100 renter households are cost burdened and 21.9 percent are severely cost burdened. The rates at available housing at 50 percent of HAMFI and 30 percent of HAMFI or below indicate that the availability of housing at their income levels are respectively -36.7 and -72.5 per 100 renter households below the demand.

Similarly **Figure 40** shows the same mismatch rates illustrated longitudinally. The availability of rental housing for all moderate-income housing units, 80 percent of HAMFI and below, has remained near parity between 2009 and 2015. However, it dropped by 2.5 units per 100 renter households in that time. Likewise, the rate of available housing for very low-income renters also decline by 7.0 units per 100. Housing units for 0-30 percent of HAMFI and below saw that most significant contracted by 2.4 units per 100 rents in this span, with some years being worse than others.

Figure 41 shows the average rate of affordable and available rental units per 100 renter households by county for each year between 2009 and 2015. Focusing on available housing units, one sees that Summit, Beaver, Emery, Rich and Wayne counties had the best ratio of housing units to renter households at or below 80 percent HAMFI, with more than 120 available units per 100 renter households in each county. In contrast, Washington County, at 91.2 available units per 100 moderate-income renter households, had the worst ratio, followed by Utah and Morgan counties at 92.9 and 97.7 respectively. On the side of available housing units per 100 extremely low-income renter households, one sees a surplus of 152.0 available units in Daggett County and 117.4 in Rich County. Salt Lake County has the greatest need for available rental housing units per 100 extremely low-income renter households at just 22.1 units per 100. Morgan Utah County was not too much further behind with an average of 22.4 units per 100 extremely low-income renter households.

WHERE AFFORDABLE AND AVAILABLE RENTAL HOUSING IS NEEDED MOST

As stated in the previous section, the rate of affordable and available rental units per one hundred moderate-income renter households facilitates fair comparisons between localities. It accounts for differences in population size. However, additional analysis is necessary to assess the relative severity of the overall housing needs of a community relative to others in order to identify regions of greatest overall housing needs.

If all the cost to income thresholds of all three moderate-income groups were weighted appropriately, which communities in Utah would have the greatest overall moderate-income housing needs? By averaging the z-score of the mismatch ratio of each income group, we were able to rank the relative housing needs of each locality by housing affordability and availability. This ranking can be seen in the tables below. Both **Table 23** and **Table 24** show that on average Washington, Utah, Salt Lake, Wasatch and Cache counties are the five counties that have the greatest affordable and available moderate-income rental housing needs per 100 renter households in Utah. By similarly ranking incorporated cities, we found that Cedar Hills, Fruit Heights, Hooper, Saratoga Springs and South Jordan had the greatest overall need for affordable and available housing per 100 renter households on average between 2009 and 2015.

Table 23: Indexed Mismatch Ratios of the Average Number of Affordable Rental Housing Units Per 100 Renter Households Between 2009 and 2015 by Income Limit Group and 29 Counties in Utah

County	Standardized Z-Scores			Average Z-Score
	≤30% HAMFI12	≤50% HAMFI13	≤80% HAMFI14	
Washington	-0.77	-1.45	-1.22	-1.15
Utah	-0.78	-1.23	-1.43	-1.15
Salt Lake	-0.95	-1.24	-0.69	-0.96
Wasatch	-0.64	-1.07	-0.71	-0.81
Cache	-0.66	-0.70	-0.93	-0.77
Weber	-0.76	-0.44	-0.77	-0.66
Iron	-0.52	-0.61	-0.84	-0.65
Grand	-0.30	-0.88	-0.65	-0.61
Davis	-0.79	-0.71	-0.16	-0.55
Sanpete	-0.21	-0.30	-0.66	-0.39
Carbon	-0.34	-0.25	-0.50	-0.36
Juab	-0.09	-0.01	-0.81	-0.30
Millard	0.18	-0.03	-0.95	-0.27
Duchesne	-0.53	-0.56	0.54	-0.19
Sevier	-0.32	0.08	-0.30	-0.18
Tooele	-0.54	-0.35	0.39	-0.17
Piute	0.71	-0.49	-0.64	-0.14
Summit	-0.49	-0.16	0.48	-0.06
Box Elder	-0.35	0.48	-0.14	0.00
Uintah	-0.55	-0.18	0.73	0.00
Beaver	0.31	0.03	0.10	0.15
San Juan	0.20	0.45	0.08	0.25
Emery	-0.01	0.74	0.60	0.44
Kane	0.23	0.36	0.86	0.49
Morgan	-0.09	2.80	0.54	1.09
Daggett	2.04	0.97	0.68	1.23
Garfield	1.21	1.23	1.97	1.47
Wayne	0.96	2.41	3.01	2.13
Rich	3.84	1.11	1.44	2.13

Source: U.S. Dept. of Housing & Urban Development (2009 to 2015). 5-year Comprehensive Housing Affordability Strategy [Data]. Retrieved from https://www.huduser.gov/portal/datasets/cp.html#2006-2015_data

Table 24: Indexed Mismatch Ratios of the Average Number of Available Rental Housing Units Per 100 Renter Households Between 2009 and 2015 by Income Limit Group and 29 Counties in Utah

County	Standardized Z-Scores			Average Z-Score
	≤30% HAMFI12	≤50% HAMFI13	≤80% HAMFI14	
Washington	-1.00	-1.74	-1.89	-1.54
Utah	-1.04	-1.73	-1.69	-1.49
Salt Lake	-1.05	-1.58	-0.75	-1.12
Wasatch	-1.13	-1.32	-0.83	-1.09
Cache	-0.85	-1.01	-0.98	-0.95
Morgan	-1.21	-0.39	-1.15	-0.92
Davis	-0.84	-0.98	-0.51	-0.78
Uintah	-0.73	-0.72	-0.83	-0.76
Duchesne	-0.55	-0.57	-0.40	-0.51
Iron	-0.41	-0.37	-0.10	-0.29
Sevier	-0.24	-0.07	-0.52	-0.28
Weber	-0.62	-0.04	-0.16	-0.27
Sanpete	-0.07	-0.04	-0.20	-0.10
Grand	0.31	-0.65	0.12	-0.07
Tooele	-0.46	-0.19	0.44	-0.07
Juab	0.34	0.01	-0.39	-0.01
Millard	0.65	0.31	-0.63	0.11
San Juan	0.27	0.07	0.15	0.16
Garfield	0.17	0.44	-0.08	0.18
Piute	0.13	0.31	0.19	0.21
Box Elder	0.25	0.44	0.36	0.35
Carbon	0.31	0.52	0.24	0.35
Kane	0.34	1.23	1.03	0.87
Summit	-0.04	0.86	1.88	0.90
Emery	0.31	1.03	1.63	0.99
Beaver	0.51	1.07	1.63	1.07
Daggett	2.22	1.60	0.10	1.30
Wayne	1.02	2.04	1.44	1.50
Rich	3.41	1.47	1.90	2.26

Source: U.S. Dept. of Housing & Urban Development (2009 to 2015). 5-year Comprehensive Housing Affordability Strategy [Data]. Retrieved from https://www.huduser.gov/portal/datasets/cp.html#2006-2015_data

DISCUSSION

It may seem like distinctions without a difference, but affordable housing, workforce housing, and moderate-income housing are not synonymous. Housing affordability is simply a ratio of housing costs to household income while moderate-income housing is based on a set of stringent regulations. A housing unit is affordable so long as its costs do not exceed 30 percent of the occupant's gross income regardless of how expensive the unit may actually be. If a household earns more, then it can afford to consume more housing. But, the affordability of housing is also constrained by its availability. In contrast, a household may receive a housing subsidy only if it qualifies as having a moderate-income below defined income thresholds. The size of the housing subsidy also depends on a household's income relative to income intervals within the same county. Qualifying for a subsidy also does not guarantee that adequate housing will be available.

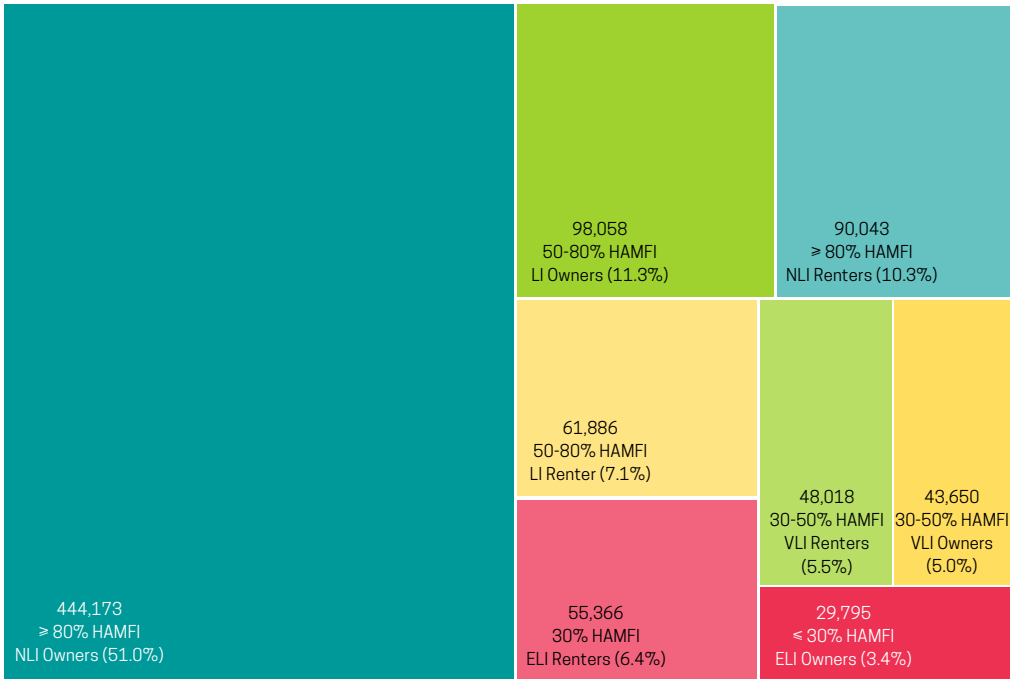
As a whole, there is only a 20 percent overlap in workforce housing and moderate-income housing. Some working class households with one or more people participating in the labor force may qualify as low-income (50-80 percent HAMFI) and therefore may be eligible for certain housing subsidies such as Section 8 Housing Choice Vouchers or the HOME program. Working class households earning more than 80 percent of HAMFI generally do not qualify for federally funded housing subsidies administered by the State of Utah.

TENURE: OWNING VS. RENTING

An overview of Utah's housing supply, income drivers, and populations provide a firm basis for understanding housing affordability and availability in the state. Still, there is the question of why Utah's annual affordable housing assessment analyzes the gap in rental housing but not the gap in owner-occupied housing. The answer is a pragmatic one: Most of Utah's funding for subsidizing moderate-income housing has come from the federal government. With few exceptions, these programs tend to only fund the development of rental properties or provide rental assistance for households earning 80 percent of HAMFI or below.

Renter households tend to earn significantly less than owner households. While the typical owner household in Utah earned 102.1 percent of HUD's 2018 Adjusted Median Income—i.e. $77,057 per year—the typical renter household only earned 50.6 percent of HAMFI, i.e. $38,196 per year according to the 2012-2016 American Community Survey. That means that the typical renter in Utah is on the edge of being a very low-income household.

Figure 42: Average Distribution of Households in Utah by Income Limit Group



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2014 [Data]

Table 25: Crosstabulation of the Average Number of Households by Income Limit Group and Tenure

	Owners		Renters		Total	
	n	%	n	%	n	%
Moderate Income ≤ 80% HAMFI	171,503	19.7%	165,269	19.0%	336,772	38.7%
Non-low Income > 80% HAMFI	444,173	51.0%	90,043	10.3%	534,216	61.3%
Total	615,676	70.7%	255,312	29.3%	870,988	100.0%

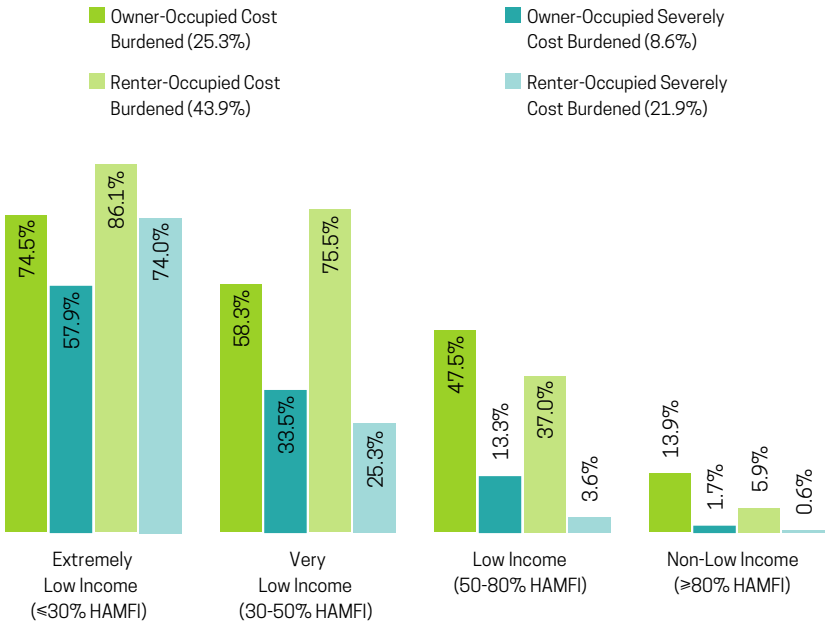
Source: HUD: Comprehensive Housing Affordability Strategy, Table 8, 2009 thru 2014 [Data]

Even when both owners and renters are grouped by income relative to HAMFI, there are significant differences. **Figure 42** provides a visual depiction of Utah's average distribution of owner and renter households over the last several years. At 51.0 percent, non-low-income owners, which is to say households that earn more than 80 percent of HAMFI annually, comprised the largest share of households in Utah on average. In contrast, only 10.3 percent of all households were non-low-income renters. As **Table 25** indicates, moderate-income owners (19.7 percent) constituted approximately the same portion of total households as moderate-income renters (19.0 percent), yet there are nearly double the numbers of extremely low-income renters (6.4 percent) than there are extremely low-income owners (3.4 percent).

There are noticeable differences in the rate of cost-burdened and severely cost-burdened renters and owners. **Figure 43** shows that renters (43.9 percent) overall are 18.6 percent more likely to be burdened by housing costs than owners (25.3 percent). It also shows that renters (21.9 percent) overall are 13.3 percent more likely to be severely burdened by housing costs than owners (8.6 percent). Interestingly, except for extremely low-income renter households, homeowners are actually more likely to be severely cost burdened by their homes than renter households. This may suggest that owners are more likely to be tempted to over-extend themselves when purchasing a home.

The final reason that the annual affordable housing assessment report focuses on rental housing instead of homeownership is the mortgage interest tax deduction. The mortgage interest tax deduction is the single largest housing subsidy in the U.S., and renters are inherently ineligible for it. The Congressional Budget Office (CBO) reported that the federal government spent approximately $37 billion on direct rental subsidies for low-income households in 2014: $18 billion on the Housing Choice Voucher program; $12 billion on project-based rental assistance; and $7 billion on public housing.[31] It indirectly provided another $7 billion in Low-Income Housing Tax Credits (LIHTC) to developers of low-income housing projects; a LIHTC is foregone tax revenue that reduces rent by lowering the upfront cost of housing production. Yet appropriations for rental assistance programs are dwarfed by federal tax incentives and subsidies to homeowners.[32,33] The same report from the CBO estimated that, "The federal government provided much more support through the tax code, about $130 billion in 2014, for housing not targeted at low-income households—mostly through the tax deductions for mortgage interest payments and for property taxes." Ostensibly, to qualify for the mortgage interest tax deduction housing subsidy, one must at least have a mortgage, but tenure choice, the decision to own or to rent, is complicated.

Figure 43: Comparison of Average Cost Burdens of Owner and Renter Households in Utah by Income Limit Group



Source: HUD: Comprehensive Housing Affordability Strategy, 2009 thru 2014 [Data]

6. CONCLUSION

In 2016, the Lieutenant Governor's Affordable Housing Taskforce commissioned the Housing and Community Development Division of the Utah Department of Workforce Services to conduct an empirical analysis of the availability of affordable rental housing for moderate-income households throughout the State of Utah. The ensuing report provided a basic framework for monitoring Utah's housing affordability gap and the growing mismatch between renters and the homes they can afford. Research from the 2016 housing assessment led to a handful of recommendations from the Lieutenant Governor's Affordable Housing Taskforce that resulted in 2017's H.B. 36. These recommendations resulted in a $6 million increase in state low-income housing tax credits, a $2,065,000 million fund for the Olene Walker Housing Loan Fund to finance additional housing developments for extremely low-income households, and it created an incentive fund that could potentially compensate landlords for physical damage to rental units caused by Section 8 Voucher recipients.

During the 2018 general legislative session, H.B. 259 and H.B. 15 required municipalities to begin reporting the use of housing allocation funds generated by their community reinvestment agencies on a biennial basis. H.B. 462 requires Housing and Community Development to monitor each municipality's supply of rental housing that is affordable at the 50 percent HAMFI level and below. Most pertinent to this report is that H.B. 430 established the Commission on Housing Affordability.

Commission on Housing Affordability

The Commission on Housing Affordability is a 20-member commission, co-chaired by Senator Jacob Anderegg and Representative Val Potter. The commission's duties include:

- Increasing public and government awareness and understanding of the housing affordability needs of the state, and how those needs may be most effectively and efficiently met, through empirical study and investigation;
- Identifying and recommending implementation of specific strategies, policies, procedures and programs to address the housing affordability needs of the state;
- Facilitating the communication and coordination of public and private entities that are involved in developing, financing, providing, advocating for and administering affordable housing in the state;
- Studying, evaluation and reporting on the status of effectiveness of policies, procedures and programs and address housing affordability in the state;
- Studying and evaluating the policies, procedures, and programs implemented by other states that address housing affordability;
- Providing a forum for public comment on issues related to housing affordability; and

- Providing recommendations to the governor and Legislature on strategies, policies, procedures and programs to address the housing affordability needs of the state.

To assist the commission in their work, there are seven advisory working groups established, focused on transit-oriented development, affordable housing production, land use, leveraging funding resources, rural housing, marketing and education, and additional research and evaluation.

Converging Public and Private Interests

Economic growth has provided significant benefits for Utah's families, but sustaining that growth is dependent upon a number of factors. Part of sustainable growth involves the deliberate cultivation of talent and maintenance of an adequate labor force. A workforce that is unable to meet its housing expectations where it works will look to improve its quality of life elsewhere when opportunities arise. Workforce housing is more than affordable housing for police officers, firefighters, teachers and other civil servants essential to the community, it is affordable housing for the crucial talent that drives Utah's economy.

Stakeholders from the private sector, non-profit sector, and the public sector approach affordable housing from largely independent perspectives. This report represented a concerted effort to coordinate and leverage the interests of all stakeholders. It built upon the contributions of each sector and sought to incorporate their insights into a pragmatic conceptual framework. Policymakers can draw upon this framework and the analysis contained within this report as they continue working on policies that will better house lower income households and Utah's most vulnerable populations. Nonetheless, because public and private interests tend to diverge, it is imperative that a safe and open forum for maintaining a dialogue between these interests remain available.

Fostering State and Local Government Collaboration

Continuing collaboration with cities and counties is crucial to the development of affordable housing for moderate-income households. The state is well-situated to help cities and counties identify the housing needs of vulnerable populations within their communities, as well as administering funding for moderate-income housing. Cities and counties have the power to locally legislate ordinances, implement zoning and levy fees and taxes that significantly affect the cost of housing within their geographic jurisdiction. Cities and counties in Utah that regularly monitor the implementation of their moderate-income housing plans are better prepared to meet the housing needs of their residents. Working together, local governments and the State can significantly improve the availability of affordable housing in our communities.

APPENDIX A: METHODOLOGY

KEY POINTS:

- Data for analyzing Utah's housing affordability mismatch data comes from the U.S. Department of Housing and Urban Development's Comprehensive Housing Affordability Strategy (CHAS) datasets from each year between 2009 and 2015.
- CHAS data are derived from 5-year estimates of the American Community Survey, which the U.S. Census Bureau conducts.
- CHAS data does not account for people experiencing homelessness, nor does it tally the housing assistance status of sampled households.
- The Urban Institute developed the housing mismatch analysis methodology for HUD's Worst Case Housing Needs reports. It is also used by the National Low-Income Housing Coalition in its annual housing gap analysis reports.

This report provided a clear analysis Utah's current affordable and available housing gap to anticipate near-term housing needs using the well-established "Worst Case Needs" method developed by the Urban Institute for the U.S. Dept. of Housing and Urban Development. Using this method, it systematically explored the scope and magnitude of Utah's housing shortage across the state over time.

Successively analyzing the distribution of greatest affordable and available housing needs over time is useful for identifying effective policies and programs that successfully remediate housing needs, evaluating the efficacy of alternative interventions, and designing more efficient strategies. Comparing the progress of localities also provides insights into how the State can better meet regional and overall housing needs.

Key to achieving this report's objectives was its building-block approach. This approach consisted of analyzing and summarizing the affordable housing needs of increasingly larger subdivisions of the State. The building-block approach helped describe the trend in Utah's housing demand as a function of local population change as well as providing an overview of the State's housing supply. Finally, it was central to identifying areas of greatest need using a relative needs analysis.

Data

Data for this assessment came primarily from three federal agencies and one state agency: The U.S. Department of Housing and Urban Development (HUD), The U.S. Census Bureau (USCB), and the U.S. Bureau of Labor Statistics (BLS), and the Utah Department of Workforce Services (DWS). The principal data sets for the enclosed affordable rental housing gap analysis came from special tabulations of the American Community Survey's 5-year estimates

called the Comprehensive Housing Affordability Strategy (CHAS). So far, the U.S. Census Bureau has prepared seven sets of these custom tabulations for the U.S. Department of Housing and Urban Development for years 2009 through 2015. Although CHAS tabulations categorize renter households into five income ranges, Utah's statutory definition of moderate-income prioritizes the three lower-income ranges: Extremely Low-Income (ELI, less than or equal to 30 percent of HUD-adjusted Area Median Family Income, a.k.a. HAMFI); Very Low-Income (VLI, between 30 to 50 percent of HAMFI); and Low-Income (LI, 50 percent to 80 percent of HAMFI). The assessment also used eight sets of 5-year estimates from the U.S. Census Bureau's American Community Survey (ACS) from 2009 to 2016 for demographic and housing data not yet in the CHAS datasets. Finally, the assessment used Bureau of Labor Statistics data from the 2009 through 2017 Local Area Unemployment Statistics (LAUS) datasets and the 2009 through 2017 Quarterly Census of Employment and Wages (QCEW) datasets to understand the economic drivers of Utah's growing demand for affordable housing.

The data used in Utah's annual affordable housing needs assessment is complex and requires more than a little explanation. The Housing and Community Development Division's (HCDD) annual assessment of Utah's affordable housing needs uses consecutive releases of state-level, county-level and municipal-level Comprehensive Housing Affordability Strategy (CHAS) data, which are publicly available on the U.S. Department of Housing and Urban Development's HUDuser.gov website. Consecutive CHAS releases enable HCDD to monitor changes in housing for lower-income households across regions and over time. CHAS data are specially commissioned tabulations of the American Community Survey (ACS) prepared by the U.S. Census Bureau. Therefore, understanding results derived from an analysis of CHAS data requires a basic understanding of the American Community Survey's methodologies.

American Community Survey (ACS)

Data used in the Municipal Housing Projection Calculator comes primarily from the American Community Survey. The American Community Survey (ACS) is an ongoing nationwide general survey conducted by the U.S. Census Bureau. After the 2010 Census, the U.S. Census Bureau replaced the long form of the decennial census with an annual randomized survey. The ACS offers timely data for the period between censuses, allowing for a relatively current picture of local conditions. It was designed with the intent to show communities how they are changing. The ACS collects information such as population estimates, housing supply, housing vacancy rates, occupant tenure status, household income, housing cost, home value, and other important data from U.S. households.

Comprehensive Housing Affordability Strategy (CHAS)

Comprehensive Housing Affordability Strategy (CHAS) datasets are derivatives of the U.S. Census Bureau's American Community Survey. Each year, the U.S. Department of Housing and Urban Development (HUD) compiles custom tabulations of American Community Survey data from the U.S. Census Bureau. Unlike the general public that must make do with the U.S. Census Bureau's Public Use Microdata Sample (PUMS), HUD has access to the full 5 year sample collected for the ACS, which it uses to develop its Comprehensive Housing Affordability Strategy (CHAS). CHAS data demonstrates the extent of housing problems and housing needs, particularly for low-income households. State and local governments use this data to plan how to spend HUD funds, and HUD may use it to distribute grant funds. Because the U.S. Department of Housing and Urban Development deconstructs ACS five year estimates and re-compiles housing and household data according to its various program eligibility criteria, CHAS Dataset releases generally lag 1.5 to 2 years behind the current ACS release.

APPENDIX B: OUT OF REACH ESTIMATES

STATE OF UTAH OUT OF REACH ESTIMATE: 2019

Utah	FY18 Housing Wage	Expected 2018 Housing Costs			Area Median Income				Renter Households				
Counties	Hourly wage needed to afford 2-BR[1] FMR[2]	2-BR FMR (2019)	Annual Income needed to afford 2-BR FMR	Full-time jobs at minimum wage[3] to afford 2-BR FMR	Expected 2019 Inflation Adjusted AMI[4]	Expected 2019 rent affordable at AMI[5]	Expected 2019 30% AMI	Expected 2019 rent affordable at 30% AMI	Renter households (2012-2016)	% of total households (2012-2016)	Expected mean renter hourly wage[6] (2019)	Monthly rent affordable at the mean renter wage (2019)	Full-time jobs at mean renter wage needed to afford 2-BR FMR
Beaver	$13.44	$699	$27,960	1.9	$51,718	$1,293	$15,516	$388	633	28.0%	$10.90	$567	1.2
Box Elder	$13.85	$720	$28,800	1.9	$59,711	$1,493	$17,913	$448	3,957	23.8%	$12.28	$639	1.1
Cache	$13.46	$700	$28,000	1.9	$55,862	$1,397	$16,758	$419	12,899	35.7%	$9.91	$515	1.4
Carbon	$13.44	$699	$27,960	1.9	$51,406	$1,285	$15,422	$386	2,146	27.7%	$12.71	$661	1.1
Daggett	$14.92	$776	$31,040	2.1	$81,679	$2,042	$24,504	$613	15	6.9%	$14.29	$743	1.0
Davis	$17.50	$910	$36,400	2.4	$78,155	$1,954	$23,446	$586	23,061	23.2%	$12.43	$646	1.4
Duchesne	$15.69	$816	$32,640	2.2	$65,874	$1,647	$19,762	$494	1,641	25.0%	$17.01	$885	0.9
Emery	$13.44	$699	$27,960	1.9	$55,153	$1,379	$16,546	$414	623	17.7%	$11.59	$603	1.2
Garfield	$13.44	$699	$27,960	1.9	$48,640	$1,216	$14,592	$365	331	20.0%	$11.30	$588	1.2
Grand	$15.88	$826	$33,040	2.2	$46,820	$1,171	$14,046	$351	1,162	30.4%	$9.56	$497	1.7
Iron	$13.44	$699	$27,960	1.9	$47,110	$1,178	$14,133	$353	5,395	35.5%	$9.53	$496	1.4
Juab	$16.58	$862	$34,480	2.3	$59,009	$1,475	$17,703	$443	634	20.1%	$12.84	$668	1.3
Kane	$15.56	$809	$32,360	2.1	$54,336	$1,358	$16,301	$408	584	22.5%	$13.48	$701	1.2
Millard	$13.44	$699	$27,960	1.9	$57,977	$1,449	$17,393	$435	912	21.9%	$13.64	$709	1.0
Morgan	$17.50	$910	$36,400	2.4	$86,979	$2,174	$26,094	$652	469	15.2%	$10.70	$556	1.6
Piute	$14.71	$765	$30,600	2.0	$39,918	$998	$11,975	$299	66	12.1%	$9.13	$475	1.6
Rich	$14.92	$776	$31,040	2.1	$56,544	$1,414	$16,963	$424	156	25.0%	$7.23	$376	2.1
Salt Lake	$20.67	$1,075	$43,000	2.9	$69,485	$1,737	$20,846	$521	119,914	33.7%	$16.88	$878	1.2
San Juan	$13.44	$699	$27,960	1.9	$44,216	$1,105	$13,265	$332	782	19.8%	$13.28	$690	1.0
Sanpete	$13.44	$699	$27,960	1.9	$52,561	$1,314	$15,768	$394	2,142	26.5%	$9.97	$518	1.3
Sevier	$13.44	$699	$27,960	1.9	$52,567	$1,314	$15,770	$394	1,648	23.1%	$11.74	$610	1.1
Summit	$22.75	$1,183	$47,320	3.1	$98,386	$2,460	$29,516	$738	3,910	26.9%	$13.82	$719	1.6
Tooele	$17.06	$887	$35,480	2.4	$68,999	$1,725	$20,700	$517	4,302	22.6%	$12.12	$630	1.4
Uintah	$17.62	$916	$36,640	2.4	$73,080	$1,827	$21,924	$548	2,701	25.2%	$17.82	$927	1.0
Utah	$16.58	$862	$34,480	2.3	$69,184	$1,730	$20,755	$519	49,602	32.8%	$13.83	$719	1.2
Wasatch	$19.87	$1,033	$41,320	2.7	$76,731	$1,918	$23,019	$575	2,559	29.4%	$12.82	$667	1.5
Washington	$17.62	$916	$36,640	2.4	$56,862	$1,422	$17,059	$426	14,741	29.3%	$13.02	$677	1.4
Wayne	$13.44	$699	$27,960	1.9	$44,836	$1,121	$13,451	$336	166	17.0%	$11.32	$589	1.2
Weber	$17.50	$910	$36,400	2.4	$64,171	$1,604	$19,251	$481	22,449	28.0%	$11.48	$597	1.5
State of Utah	$18.31	$952	$38,094	2.5	$67,245	$1,681	$20,173	$504	279,600	30.4%	$14.63	$761	1.3

1: BR = Bedroom

2: FMR = HUD (2017) Fair Market Rent, Fiscal Year 2018.

3: Minimum wage = $7.25/hr.

4: AMI = 2016 Area Median Income inflated to 2019 Constant dollars via BLS Consumer Price Index.

5: Affordable rent represents the generally accepted standard of ≤30% gross household income on gross rent.

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